

# FINANCIAL TIMES

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**FT Guide**  
Doing business  
on-line  
Magazine

World Business Newspaper <http://www.ft.com> WEDNESDAY DECEMBER 4 1996

**Software market**  
surges ahead  
As the world software  
market climbs towards  
\$180bn by the year 2000,  
suppliers are surging  
the Internet wave in a race to  
win greater market shares.  
See today's Review of  
Information Technology.

## Manufacturers may be forced to recycle cars

The European Commission is completing plans to oblige carmakers to take back scrap cars and recycle their components. Ludwig Krüger, Commission official responsible for waste management, said the aim was to cut the amount of car scrap sent to landfill or abandoned. Several manufacturers have already concluded more flexible voluntary recycling agreements with a handful of governments. Page 16

**Channel tunnel services resume:** Eurostar passenger train services through the fire-damaged Channel tunnel will resume today, but passenger shuttle services, run by Euro-tunnel, will not restart until next week. Page 16

**German recovery falters:** German industrial production fell in October for the second month, prompting fears that the country's economic recovery might be heading for another pause. Page 4

**Porsche recovery accelerates:** The recovery at German sports car maker Porsche picked up speed in the first quarter, with turnover climbing 40 per cent to DM822m (\$537m). Page 17; VW share threat, Page 19

**Gold falls through \$370 barrier:** Gold fell through the psychologically important \$370 a troy ounce barrier in London to close at \$367.85, down \$3.20 from Monday's close. Market reports, Page 26

**Open skies talks reopen:** Efforts to reach an "open skies" agreement to liberalise air traffic between the UK and the US re-open today in London. Page 9

**S Korea labour plans fail OECD terms:** South Korea unveiled reform proposals to its strict military-era labour laws that fall short of commitments made to the Organisation for Economic Co-operation and Development during the country's recent accession negotiations. Page 16

**Israeli economy 'set to quadruple':** Israel's economy will quadruple in size and the country could become one of the 15 richest nations in the world within 15 years, prime minister Benjamin Netanyahu said. Page 5

**UK oil output set for record:** UK oil production is expected to rise by 210,000 barrels a day next year to a record 2.78m bpd, a study by oil consultant Wood Mackenzie shows. Page 10; Lex, Page 16

**Four combine for radio contract bid:** Racal, Siemens Plessey and IFF are to combine their bids for the £2bn (\$3.34bn) contract to replace the British army's battlefield radio system, in a move which is likely to undermine the Ministry of Defence's flagship competition. Page 17

**Japan's recovery edges ahead:** Japanese economic growth inched ahead at an annualised 0.4 per cent in the three months to September, in line with market expectations of a weak recovery, government figures show. Page 6

**Shares slip as £260m:** The UK government yesterday sold almost its entire portfolio of shares resulting from privatisations of utility industries for nearly £260m (\$434m), taking receipts from privatisations this year to more than £4bn. Page 11

**Two Dogs sold to Pernod Ricard:** Australian drinks group Two Dogs, inventor of the alcoholic lemon drink which started the craze for alcopops, was bought by French drinks producer Pernod Ricard. Page 17; Lex, Page 16

**Toymakers 'risk workers' lives':** Toymakers are putting the lives of workers in third world factories at risk to satisfy the west's Christmas buying spree, a lobby group claims. UK consumers are likely to spend up to £200m (\$1.3bn) on toys this month. Page 9

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STOCK MARKET INDICES	
New York: Dow Jones Ind. Av.	5,519.00 (+10.80)
NASDAQ Composite	1,298.00 (+8.18)
Europe and Far East	
CAC 40	2,948.11 (+30.40)
DAX	2,988.98 (+29.38)
FTSE 100	4,091.5 (+20.10)
Nikkei	10,638.55 (+4.13)

US BOND YIELDS	
3-mth Treasury Bill	5.47%
6-mth Treasury Bill	5.49%
12-mth Treasury Bill	5.50%
10-yr Treasury Note	5.51%
30-yr Treasury Bond	5.52%

NORTH SEA OIL (Aargau)	
Brent Blend	24.55 (\$2.55)
UK Brent	24.55 (\$2.55)
Amst. 1500	24.55 (\$2.55)
Osaka 1500	24.55 (\$2.55)
London 1500	24.55 (\$2.55)
Amst. 1500	24.55 (\$2.55)
Osaka 1500	24.55 (\$2.55)
London 1500	24.55 (\$2.55)

## Dollar jumps against D-Mark

By Simon Kuper and Graham Bowley in London

The dollar hit a 23-month high against the D-Mark yesterday after Bundesbank and US Federal Reserve officials said it might become a more favoured reserve currency than the future single European currency.

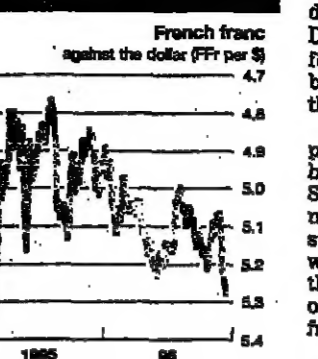
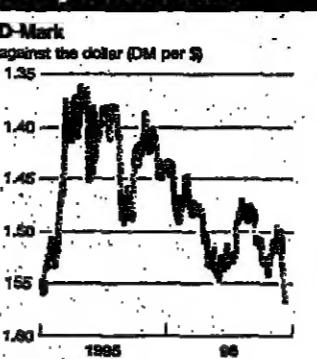
The dollar, which has drifted for months, was also buoyed by French and German calls for a stronger US currency to stimulate the French economy. The initial trigger for the dollar's surge was a speech on Monday by Mr Oskar Lafontaine, Bundesbank chief economist. He raised the possibility that the launch of the single currency, the euro, could cause a shift in dollar demand as central banks and investors waited for the new cur-

### US currency hits 23-month high on predictions Emu could add to its investment role

rency to prove its strength. Mr William McDonough, president of the New York Fed, also said the dollar would become more important as the euro approached. Mr Lafontaine cautioned that the euro's launch could cut demand for foreign currency holdings, thus hurting the dollar. However, the markets largely ignored this comment. The dollar broke through the narrow range of DM1.50-DM1.55, in which it had traded for months, to close at DM1.587 in London yesterday, 2.5 pfennigs stronger on the day. It

also hit 23-month highs against the Swiss franc, closed 6.1 centimes stronger against the French franc and rose more than 3 cents against the pound to \$1.652. Sterling experienced a sudden halt to its recent sharp rise as investors decided to take profits. It was one of the most turbulent days for the currency since it fell out of the exchange rate mechanism in September 1992. The US currency was also pushed higher by investors' belief that France had persuaded Germany to seek a

### Story of two falls



stronger dollar. This week Mr Hans Tietmeyer, Bundesbank president, was quoted as saying he would have "no complaints" about a slightly higher dollar. Many currency

strategists had thought the Bundesbank regarded DM1.55 as the dollar's target ceiling. The strategists said Mr Tietmeyer was responding to calls from French politicians and

policymakers for a weaker franc. Paris has refused to devalue the franc against the D-Mark, which it has tracked for more than a decade, because such a move could throw Emu into jeopardy. But Mr Alain Juppé, French prime minister, said last week he would ask the Group of Seven leading industrialised nations to raise the issue of a stronger dollar. France also wants the euro to be weaker than the D-Mark has been, in order to boost exports from a future Emu zone. Currency traders are speculating that the Bundesbank may cut German interest rates soon, but most strategists believe such a move unlikely.

## Two killed in bomb blast on Paris train

By Andrew Jack and David Owen in Paris

France was braced last night for a renewed outburst of terrorist activity after two people were killed and seven very severely injured in a bomb explosion on a rush-hour train in central Paris.

The explosion, soon after 6pm Paris time, was on an RER suburban train at Port Royal station in the fifth arrondissement. About another 50 people in the train or on the platform received less serious injuries. Mr Alain Juppé, the prime minister, who rushed to the scene, said there appeared to have been a gas canister on the train which exploded, suggesting the work of terrorists.

There were no claims of responsibility last night, although the attack bore the hallmarks of the wave of terrorist attacks in France last year linked to a group of Islamic extremists opposed to the Algerian government.

Other groups including the FLNOC, the Basque separatist group, have stepped up action in recent months, but neither has used such bloody tactics or targeted Paris.

The scene of the explosion,



by the southern tip of the Luxembourg Gardens, was last night awash with the flashing blue lights of the emergency services. Mr Patrick Chassinat, director of La Closerie des Lilas restaurant opposite the station, said he heard an explosion just after 6pm and saw a huge cloud of smoke.

In July last year, a gas canister exploded on an RER train at St Michel in the centre of Paris, killing eight people and injuring 117.

A series of explosions in the following three months injured more than 100 people in Paris, while other bombs were discovered near Lyons, on the high-speed rail track between

Continued on Page 16



Opposition leaders Vuk Draskovic, left, and Zoran Djindjic, right, wave to supporters during a protest march in Belgrade yesterday against Serbian president Slobodan Milosevic. Bosnia aid hinges on compliance with accord, Page 3

## Boeing in deal with McDonnell Douglas

By Christopher Parkes in Los Angeles

Boeing, the world's leading commercial aircraft maker, has extended a helping hand to its troubled competitor, McDonnell Douglas, with a plan for full collaboration on jetliner design and production.

The agreement, to be signed next month, follows a series of severe setbacks for McDonnell Douglas in both the commercial and military aircraft markets in recent months.

McDonnell is in effect trans-

ferring all its wide-body expertise - based on the DC-10, the MD-11 and the recently scrapped MD-XX project - to its main rival.

In return, it is expected to win a substantial share of the production work on the new generation jets. Several hundred McDonnell engineers will move almost immediately from their Long Beach, California, base to start contract work at Boeing's Seattle plants on designs for new versions of the 747. The first of

the new aircraft, the 747-500X, is already being offered for sale and is scheduled to go into service in 2001.

The deal follows at least a

Continued on Page 16  
Personal View, Page 14

## LucasVarity to cut jobs in \$420m restructuring

By Tim Burt in London

LucasVarity, the Anglo-US engineering group, yesterday announced a sweeping \$420m (£260m) restructuring and disposal programme involving a cut of 8,000 in the group's payroll over the next year.

The shake-up, expected to involve heavy redundancies at plants in the UK and continental Europe, comes 100 days after the £3.2bn merger of Lucas Industries and Varity Corporation of the US.

Mr Victor Rice, chief executive of the enlarged group, said the programme would lead to annual cost savings of at least \$120m and warned that further rationalisation was in the pipeline.

"The savings will help the company achieve the aggressive performance targets it has set itself," said Mr Rice, formerly chairman of Varity. About 3,000 jobs are expected to be cut as a result of increased operating efficiency

and plant rationalisation, while plans to withdraw from 13 non-core businesses will see the headcount fall by a further 5,000.

The company declined to identify where the redundancies would fall, but industry analysts expect cuts at brake-manufacturing plants including Cwmbran and Pontypool in Wales, Koblenz in Germany and Michigan in the US.

Mr Rice said the job cuts - achieved mostly through voluntary redundancies and natural wastage - would lead to a one-off charge of \$120m, which would be taken against the group's profits for the six months to January 31 next year.

He also announced a further \$120m charge for asset write-downs, mainly on the 13 businesses earmarked for disposal. They include Lucas's heavy duty products and industrial components businesses in the UK and its headlamps and ignition operations in Brazil

and Argentina. LucasVarity officials indicated that the disposals would raise at least \$100m.

The restructuring goes far deeper than envisaged at the time of merger, when Mr Rice outlined relatively modest plans for \$65m of savings and \$50m in one-off charges.

Shares in the company, however, fell 18 1/2% to 234p amid concern among industry analysts that the group was suffering from sluggish market conditions.

More than 15m shares changed hands after Mr John Grant, finance director, said the group was experiencing a cyclical downturn in heavy duty braking and slackening demand for some diesel components.

That persuaded some analysts to trim profit forecasts for next year from about \$410m to \$380m.

Observer, Page 15  
Lex, Page 16

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## NEWS: EUROPE

## Offshore centres' regulation under fire

Isle of Man and Channel Islands standards have been attacked by Brussels, reports Clay Harris

The European Commission's chief fraud-fighter yesterday accused the Channel Islands and the Isle of Man of having "lax regulation even by offshore standards", making them an ideal location for hiding illegal activities.

The secrecy afforded by Switzerland was also a problem for its European Union neighbours and a "boon to fraudsters", Mr Per Brix Knudsen, director of the Commission's anti-fraud co-ordination unit, told an International Financial Fraud Convention in London.

His remarks were publicly challenged by Ms Jannine Birtwistle, head of compliance at Credit Suisse (Guernsey) and a former regulator on the island. She said Guernsey's regulation had been favourably assessed by the Financial Action Task Force set up by the G7.

But Mr Knudsen's attack on offshore centres was echoed by Mr John Moscow, deputy chief of investigations for the New York district attorney's office.

After outlining a case involving the Cook Islands, a New Zealand protectorate,

Mr Moscow said: "There are jurisdictions which wish to earn their living protecting crooks."

Mr Knudsen, a Dane, said illicit entry of goods into the EU was alone costing member countries' treasuries Ecu5bn-Ecu6bn (\$6.3bn-\$7.6bn) in lost revenue each year. Smugglers' potential profit per lorry or container ranged from Ecu1m for cigarettes to Ecu100,000 for agricultural products. The Commission unit was also focusing on fraud in the public sector.

He said: "None of this is

exclusive to the European Union. This is a truly worldwide phenomenon." Money acquired illicitly was then hidden in "phantom entities in safe havens and offshore centres". Existing arrangements for international judicial co-operation were "old-fashioned and bureaucratic", Mr Knudsen said.

These needed to be simplified and streamlined, and national law enforcement agencies should integrate their efforts and introduce more specialisation.

Mr Moscow, whose cases included Bank of Credit and

Commerce International, said he was now investigating "a securities dealer in New York who stole in the region of \$20m-\$50m. He appears to have an account in the Cook Islands", whose law states that no court order can breach its banking secrecy.

"Under pressure from the civilised world," he said, traditional offshore centres were changing their laws, but other countries were now offering total secrecy.

Mr Moscow said: "Internal corporate secrecy is the first step towards large-scale

international fraud. Bank files have to be accurate and complete. That means you don't have one person who knows the identity and others who comply with subpoenas."

"Little things like the name of the borrower have to be correct. You can look at [BCCI's] files and not have a clue what happened. It would say: '\$100m loaned to borrower at your request.' Wow, you can kiss that money goodbye."

The convention was organised by International Conference Group.

US company ACNielsen agrees to end anti-competitive practices

## EU market research row is resolved

By Roderick Oram, Consumer Industries Editor

The US market research company ACNielsen has agreed to end anti-competitive practices in the European market under pressure from the European Commission.

The company had been locked in a bitter dispute over European market research with Information Resources Inc (IRI) of the US, which cost the two companies some \$26m (\$41.75m) in losses in the UK alone last year.

IRI, which is also seeking \$1m in damages from Nielsen through the US courts, filed a complaint two years ago against Nielsen, which was recently spun off to a US stock market offering by its former parent, Dun & Bradstreet.

The Commission has won undertakings from Nielsen to desist from practices which it believed contravened the Treaty of Rome.

Until IRI began European operations in 1992, Nielsen had a virtual monopoly of buying sales data from supermarkets and other retailers and selling it to manufacturers of food, drink, personal products and other consumer goods.

IRI alleged that Nielsen had tried to prevent it establishing a European business by offering customers discounts of up to 30 per cent if they bought its services across Europe.

IRI argued, however, that data were almost exclusively analysed by country markets. "We should be charging a premium for integrating European data," said Mr Tim Bowles, IRI's president of European information services.

Nielsen has pledged to the

Commission it will unbundle its services and stop demanding exclusive contracts with retailers whereby they cannot sell their sales data to other market research companies. The undertakings will remain in place for three years, with Nielsen reporting periodically to the Commission.

The Commission said the undertakings were "very significant". They would increase competition in the market for retail tracking services.

They also marked a further step in anti-trust co-operation between Europe and the US. The Commission had also investigated Nielsen on behalf of the US department of justice.

"We are delighted to put this matter behind us," said Mr Nicholas Trivisonno, chairman of Nielsen. The practices "were not material to ACNielsen, nor were they part of any anti-competitive scheme". The company had stopped them after the Commission had delivered its statement of objection to them in May.

"All we wanted was a level playing field," said Mr Bowles of IRI, which has about 35 per cent share of the retail tracking market in the UK, with the balance held largely by Nielsen. It is also building up operations elsewhere in Europe.

IRI said it had lost £12m last year in the UK. Company House records show Nielsen lost £12m on turnover of £45m in its UK market research operations in the year to November 1995.

One factor IRI pointed to was the sharp escalation in fees Nielsen paid to retailers to try to keep IRI out of the market. Typically UK fees are about six times those paid in France.

## Fischler proposes European-type FDA

By Caroline Southey in Brussels

Mr Franz Fischler, the European Union's agriculture commissioner, yesterday called for changes in the way the Union handles diseases such as bovine spongiform encephalopathy, or mad cow disease, citing as a model the US Food and Drug Administration.

He told the European parliament's inquiry into the EU's management of BSE that mistakes had been made in the response to BSE since the first suggestions in 1986 that it posed a threat to consumers. He blamed the mistakes on inbuilt weaknesses in the EU's "model" of managing public health issues.

He said the FDA regime was "one example of a body that commands public respect". The agency, which is charged with protecting

the public against unsafe foods, drugs and other potential hazards, is an independent federal body with law-enforcing powers.

The parliamentary inquiry, which has heard evidence from over 20 witnesses, has unearthed evidence of mismanagement and oversight on the part of the Commission, member states and their representatives on the standing veterinary committee.

The report, due in mid-January, is expected to call

for changes in the way the EU manages consumer protection.

Mr Fischler told the inquiry that decisions taken at EU level in response to the spread of BSE "were correct. But the implementation and control were not as they should have been".

However, he emphasised that the responsibility for implementing measures to control BSE rested primarily with member states.

"What means do we have to force the member states to

meet their obligations? Should we not be thinking of new instruments?" he asked.

Mr Fischler identified weaknesses in the EU's public health regime. These included uncertainty over whether responsibility for protecting human health rested with member states or with the Commission and whether "specialist" committees, such as the standing veterinary committee, charged with advising the Commission on health and

safety issues, were sufficiently independent. A further weakness was that public health is the responsibility of two departments in the Commission - agriculture and social affairs. The Commission, in an internal and secret inquiry conducted last year, found that there was little communication between departments, that officials relied on informal contacts and that there was a lack of control and co-ordination of key health dossiers.

## Summer target set for EU gas accord

By Neil Buckley in Brussels

European Union energy ministers yesterday set next summer as a target for agreement on allowing large gas consumers to shop around for supplies, but could not hide deep divisions on important issues.

It was their first discussion on liberalising the EU gas market since June's hard-fought agreement on opening up the electricity market.

"I am confident there is a political determination to get a directive in the short, rather than medium or long term," said Mr Emmet Stager, Irish energy minister, who chaired the meeting. But, while no state voiced outright opposition, months of bargaining lie ahead over the extent to which the market should be liberalised, and who will be eligible to shop around for gas.

Another key issue is how to deal with distributors holding long-term supply contracts with producers. They could find themselves paying for gas they cannot sell if their customer base shrinks as a result of competition. Little progress was made yesterday on these "take or pay" contracts, the industry's biggest concern. The complexity of these issues could dash hopes of agreement by next summer.

As in the electricity market, large gas consumers want the stranglehold of national gas monopolies broken, claiming this could knock millions of dollars off their bills.

But EU states are divided between those such as Britain and Germany, which want a rapid, substantial market opening, and those, such as France, which favour a more gradual approach.

Ministers agreed broadly on three important issues yesterday. They approved the principle that EU states can impose public service obligations on gas operators: on prices and quality, and environmental issues and security of supply, though differences existed on how flexible these obligations should be.

They also agreed that the accounts of gas operators' production and transmission activities should be separated to prevent cross-subsidy and to ensure competitors are charged a fair price for access to transmission networks.

Ministers accepted member states could choose between two models of granting access for new market entrants to gas transmission networks - free negotiation between the new entrant and the network operator, or "regulated access" on

the basis of common rules.

They made little headway on the extent or mechanics of market opening. France warned that the vast differences in EU gas markets might make it impossible to agree "quantitative" percentage openings, as in the electricity market. "Qualitative" criteria, such as allowing competition to certain types or sizes of gas user, might be necessary.

David Buckan adds: Half France's 140,000 gas and electricity workers went on strike yesterday in protest at the proposal to liberalise the EU gas market put to energy ministers in Brussels yesterday. A government statement promised France would defend its "public service à la française in gas as it has for electricity". France has persuaded its partners to agree that liberalisation of electricity should be partial and phased in.

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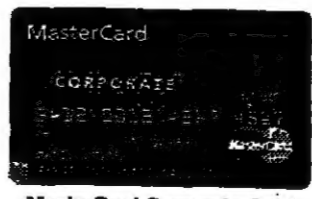
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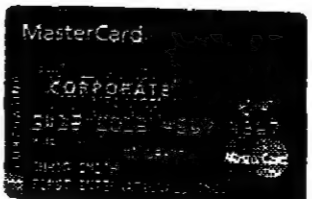
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# Bosnia aid hinges on compliance with Dayton accord

By Laura Silber in Belgrade, Bruce Clark in Lisbon and Anthony Robinson in London

Bosnia's suspicious ethnic communities will be told they must prepare to take responsibility for their own fate as Croat-Muslims and Bosnian Serbs meet foreign donors of aid and military assistance in London today.

They should be under no illusion. The international community is not prepared for an indefinite, Cyprus-style intermediary role," British officials said on the eve of a two-day conference in London. On the agenda is next year's targets for further implementation of the economic, security and institutional aspects of last December's Dayton peace agreements.

Nato has already agreed to maintain a reduced 31,000-strong force next year, and an aid-planning conference

is scheduled early in 1997. But today, Bosnia's Serb, Croat and Moslem communities will be told that access to aid for rebuilding Bosnia's shattered economy will be conditional on governments fulfilling the obligations they accepted at Dayton.

Republika Srpska, the Serbian entity, has received a fraction of the aid received by the Croat-Muslim federation this year because of its reluctance to allow refugees to return, and its

refusal to hand over indicted war criminals or comply with other Dayton provisions. But the record of the federation government has been only marginally better, and then mainly because of the greater presence on the ground of foreign diplomats, soldiers and aid agencies.

Foreign governments, aid agencies and soldiers fear that the post-Dayton separation of forces created an armed truce but will be insufficient to keep

the peace without faster progress in economic reconstruction. This is being co-ordinated by the World Bank, the IMF and the European Union. The British government's Overseas Development Agency, acting closely with the British Army, has been one of the main forces behind the economic regeneration effort, implementing 600 projects.

But there is little sign that Bosnia's main communities - Serbs, Croats and Moslems - are

prepared to abandon their conflicting visions of Bosnia's future or co-operate in projects of mutual benefit.

The civilian side of implementation has been headed by Mr Carl Bildt, the former Swedish prime minister. In Lisbon yesterday he brushed aside speculation that he intended stepping down, adding that the London conference was likely to upgrade and extend for two years the post of "high representative" of the

international community.

Today's conference will concentrate on Bosnia but takes place against the background of daily street protests in Belgrade against Mr Slobodan Milosevic, the Serbian president, and doubts about the health and longevity of Mr Franjo Tudjman, his Croatian counterpart. Both men promoted the war of Yugoslav succession but have been seen up to now as guarantors of the Dayton accords.

## EUROPEAN NEWS DIGEST

### Lagardère set for go-ahead

The Lagardère group's purchase of Thomson, the French state-owned defence and consumer electronics holding company, is expected to be cleared today by Mr Karel Van Miert, the EU competition commissioner. He is also likely to give the all-clear to Daewoo of Korea to buy the consumer electronics division, Thomson Multimedia.

However, Brussels is likely to attach tough conditions to approval of a FF11bn (\$2bn) capital injection from the French government to Thomson to reduce part of its FF25bn debt. A decision on this part of the deal is not likely before the middle of the month, by when Mr Van Miert will have had to decide whether the aid will be used purely for restructuring, in which case it is permissible under the EU treaty.

Emma Tucker, Brussels, and David Owen, Paris

### Greek farm protest widens

Greek farmers threw up more road and rail barricades yesterday, causing transport chaos for a sixth day. Their action, backed by some 6,000 tractors, is in support of demands for lower fuel prices and value added tax on equipment, higher farm subsidies, and the rescheduling of \$1.3bn in debts with state banks. Queues of international and domestic lorries grew at more than 25 blockades of main roads around the country.

It is the first challenge to the economic policies of Mr Costas Simitis, the prime minister, since his Socialist party won September's general election. Mr Simitis, whose priority is meeting the European Union targets for economic and monetary union, has ignored calls by the farmers for a meeting.

Reuter, Athens

### Threat to Belgian aid

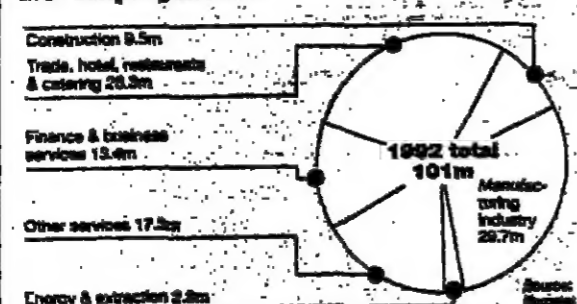
Mr Karel Van Miert, EU competition commissioner, said yesterday he would ask the Belgian government to recover some BF11.4bn (\$380m) of state aid paid as part of a government scheme to help companies most exposed to international competition. A formal decision ruling the aid illegal is expected today.

The aid, paid under the "Operation Maribel" scheme, was given in the form of lower social security contributions and lighter labour costs. The government will have two months to decide how to recover the aid. However, Mr Van Miert said companies with 20 workers or less could keep aid of less than BF1m, paid over three years, as such amounts could not be judged to have distorted competition.

Emma Tucker

### Half of jobs in small business

#### EU employment



Around 99 per cent of businesses in the EU employ fewer than 50 people but account for half of all employment and nearly half of total turnover, a report from Eurostat, the EU statistical office, said yesterday. Large concerns employing more than 250 people are responsible for 34m jobs, a third of the total.

Some 40 per cent of EU enterprises are involved in the wholesale and retail trade and hotels, restaurants and catering. Finance and business services account for 15 per cent; manufacturing and construction each account for around 13 per cent.

Foreign Staff

### Dutch drugs to go by post

Curmark International of Illinois has signed an agreement with the Dutch health insurer Zilveren Kruis Group to provide postal distribution of prescription drugs for 2.5m people covered by Zilveren Kruis and its four affiliated companies. The deal is said to be Europe's first US-style prescription benefit management (PBM) scheme. PBMs in the US manage drug purchasing and distribution for clients such as health insurers and have grown rapidly as part of the effort to control costs.

Daniel Green, London

### Serbs shut radio stations

Serbia closed an independent Belgrade radio station yesterday to halt its live reporting of the 16 days of opposition demonstrations aimed at ousting President Slobodan Milosevic.

Radio B-92 said the communications ministry had ordered it to stop broadcasting, while 50,000 students and opposition supporters took to the streets of Belgrade again in protest against election rigging by the ruling Socialists.

Radio Index also disappeared from the air as the authorities cracked down on the independent media, and state media accused the demonstrators of fomenting violence and "terrorism". Staff at Radio Index could not immediately be reached but Radio B-92 said the ministry had removed its frequency. The radio suffered frequent jamming during earlier demonstrations.

Reuter, Belgrade

### Madrid trims company tax

Spain's governing centre-right Popular party has introduced a tax cut for small companies into the 1997 budget, currently going through parliament. The measure is expected to make a dent of at least Ptas20bn (\$155m) in the government's financial calculations for the year, in which it is aiming to meet the budget deficit target for joining the European single currency in 1999.

The move is a response to a corporate tax reduction by regional authorities in the Basque country, using their fiscal autonomy to set a lower 32.5 per cent rate on company profits compared with a standard rate of 35 per cent. The Basque initiative is contested by the central government, and has provoked anger in other regions.

The PP proposal promises a special lower rate of 30 per cent for the first Ptas1m of profits earned by small companies with annual sales of less than Ptas250m.

David White, Madrid

## Greece tries to plug its leaky tax system

The Greek government's campaign to update its eccentric taxation system has ended an ancient tradition of tax breaks for almost 300 special interest groups: from mothers of large families to Olympic gold medalists.

The finance ministry says the measures will bring in only Dr150bn (\$22bn) next year but claims this figure could rise to as much as Dr700bn yearly as details of other tax allowances are unearthed from the archives. To avoid a political outcry, many changes were slipped into laws on unrelated topics during their final reading and approved in late-night sessions of parliament.

"There are probably about 800 categories of allowances altogether, but to find them you'd have to examine every law passed in the past 60 years because the finance ministry never made a list," says an economist at Kete, the state planning institute, which prepared a study of tax allowances for the finance ministry. Modernising the tax system is part of the Socialist government's effort to lower the budget deficit and eventually qualify for European monetary union. Mr Yannis Papantonis, economy minister, last week presented to parliament a budget for 1997

which aims to reduce the deficit from 7.6 per cent to 4.3 per cent of gross domestic product. Savings of Dr1,000bn will be required to achieve this target, though most of the gain is projected to come from higher tax revenues.

Most of the tax breaks accumulated under Greece's pervasive patronage system as special interest groups exploited their connections with senior politicians. In return for concessions from the finance ministry, they were expected to deliver blocks of votes.

As late as 1990, the Greek journalists' union persuaded Mr Constantine Mitsotakis

that his government would receive more positive coverage by guaranteeing journalists a tax deduction. It helped that, as an impoverished young politician on Crete, Mr Mitsotakis used to write and publish his own newspaper.

The finance ministry granted other allowances in self-conscious imitation of classical Greece, where city states would reward mothers for producing a clutch of sons and give lifetime benefits to athletes who triumphed at the ancient Olympic Games.

One sought-after privilege was importing a luxury car tax-free, enjoyed by MPs and

a few other groups. Among them were ethnic Greek immigrants from the former Soviet Union, who would arrange to hand over the tax-free Mercedes they could not afford to a well-connected Athenian in return for a cash payment.

The Socialists claim that abolishing tax privileges will mean sharing the fiscal burden more equitably. Government officials have been quick to point out that judges, singers and ships' officers (sometimes ship-owners as well) would also lose their special allowances.

However, the government was forced to make some last-minute compromises.

MPs will keep their car privilege for another year so that 80 newcomers elected last September can take delivery of their vehicles.

Greece's four gold medalists from the Atlanta Olympics, who quickly acquired the status of popular heroes, will also be allowed a year's fiscal breathing space.

Nor have the mothers been forgotten. In response to vociferous complaints, Mr Costas Simitis, the prime minister, announced that the loss of their tax-free pensions would be compensated for by increased allowances for each child.

Kerin Hope

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## NEWS: EUROPE

## Russia's miners strike over late pay

By John Thornhill in Moscow

Russia's coalminers yesterday claimed to have shut down 161 of the country's 189 mines as they started an indefinite national strike to protest at delayed wages.

Mr Vitaly Budko, chairman of the main coalminers' union, said 80 per cent of Russia's 500,000 miners were pursuing strike action to demand the government's resignation. He said some miners had not been paid since June.

"Resignation of the government is not our aim, it is our cry of despair, to make them negotiate with us," Mr Budko said.

Russian news agencies reported that Mr Victor Chernomyrdin, the prime minister, would visit the strike-torn Kuzbass region on his return from the summit meeting in Portugal of the Organisation for Security and Co-operation in Europe in an attempt to defuse the crisis.

More than 150 workers at the Leningrad nuclear power plant also went on strike yesterday over wage arrears and other worker protests took place across the country.

Wage arrears in the economy have snowballed since the presidential elections in July and are expected to reach Rb50,000bn (\$6bn) by the end of the year. A severe shortfall in tax revenues has forced ministries to freeze many of their spending programmes in a desperate attempt to stick to this year's target budget deficit.

Coalminers have resorted to strikes in the past but their protests have normally fizzled out after a few weeks. Divisions between unions and coalmining regions have undermined the miners' collective strength.

A mission from the World Bank arrives in Moscow today to review the second tranche of a \$600m support loan to the coal industry.

## Setback for German recovery

By Peter Norman in Bonn

German industrial production fell in October for the second consecutive month, prompting fears that the country's fragile economic recovery might be heading for another pause.

Financial markets, however, shrugged aside yesterday's gloomy news. Drawing on the dollar's strength for inspiration, they pushed blue chip equities to a record high while long-term interest rates - as measured by the Bundesbank's average of public bond yields - fell to an historic low.

The Dax index closed 47.30 up at 2,900.76. The average bond yield fell to 5.02 per cent from 5.05 per cent.

A 3.6 per cent rise in exports in the nine months to September and an upbeat forecast of 3 per cent indus-

trial production growth next year from the Ifo economic research institute indicated that Germany is still some way from recession, despite a separate warning of record bankruptcies this year and next.

According to the economics ministry, overall industrial production in October dropped by a provisional, seasonally adjusted 1.3 per cent from September after a 0.6 per cent fall the previous month.

Although the scale of September's decline was revised from the unexpectedly sharp 1.5 per cent drop reported a month ago, output in October and September combined was 1.5 per cent lower than in July and August and only 0.2 per cent higher than in September and October last year.

Mr Stephen King, chief

European economist of HSBC James Capel in London, said the October production figures were well below market expectations, and suggested the industrial recovery which started earlier this year had stalled.

"The combination of weak industrial data and rising unemployment suggests that fully fledged recovery is still not in the bag," he said. "However, a relapse into recession is unlikely given the continued strength of the Ifo survey and, in particular, the continued improvement in the inventory position."

The Munich-based Ifo institute yesterday predicted output in manufacturing industry growing to 3 per cent next year from 1 per cent in 1996, and was especially bullish about prospects for the office machin-

ery, iron and steel, vehicle building and electrical machinery sectors. However, it warned that industry would play no part in cutting Germany's 4m registered unemployed.

Ifo and Germany's other leading economic research institutes expect the economy to grow next year by 2.5 per cent. But Creditreform, the association of German credit research companies, said such growth would not prevent a rise in business insolvencies to a new high of 24,500 next year from a forecast record of 28,500 this year.

Contrasting with the depressed domestic economy, Germany's export business has continued to prosper. The visible trade surplus rose to DM2.3bn (\$54bn) in September from DM7.6bn a year earlier,



reflecting a 0.2 per cent rise in exports at the same time as a 0.2 per cent decline in imports. The current account deficit was cut to DM1.6bn in September from DM2.4bn in September 1995. World Stock Markets, Page 36

## Stark home truths of a stability pact

The blank expression on the face of Mr Jürgen Stark, Germany's deputy finance minister, spoke volumes late on Monday night.

Exhausted at the end of a 12-hour meeting of European Union finance ministers in Brussels, Mr Stark's goal was to get home fast. "Where are the cars?" he demanded. "Where are the cars?"

It had been a tough day for the Germans. Virtually isolated over their demands for steep and automatic fines against countries running excessive deficits in the planned single currency zone, they spent much of the day beating a tactical retreat.

At the heart of the talks on the German-backed budget stability pact is how to punish countries which run up deficits in excess of 3 per cent of gross domestic product after joining monetary union.

Ministers agreed on the size of eventual fines against fiscal delinquents, ranging from a minimum of 0.2 per cent of GDP and a maximum of 0.5 per cent of GDP. They also agreed that politicians should have the last word on whether to impose these fines.

Two issues are outstanding. The first is how to define the Germans' satisfaction the "temporary and exceptional" circumstances which would allow a country to escape penalties.

Mr Theo Waigel, Germany's finance minister, initially proposed a 3 per cent drop in output over four consecutive quarters, but on Monday he shifted down to a decline of 1.5 per cent in output. This moves Bonn close to the "Wicks Box" - the compromise proposal put forward by Sir Nigel Wicks, the senior UK civil servant who presides over the EU monetary committee.

The committee has proposed that all countries that suffer an annual fall of 0.5

per cent of GDP should be presumed guilty of running an excessive deficit and face punishment. A "grey zone" covering falls in GDP ranging from 0.5 per cent to 2 per cent would be left to ministerial discretion, bearing in mind a country's record in fiscal discipline and its prospects for recovery.

The second issue turns on the role of the European Commission. Germany is uneasy about the Commission's monopoly right of initiative which allows it to decide whether to set in train the excessive deficit procedure. Thus, Bonn first

**Ministers agreed on the size of fines against fiscal delinquents, starting at 0.2 per cent of GDP**

sought to move the whole process out of the EU framework and make it a matter between countries taking part in Emu. But other countries suspected a German plot to build a "Community within a Community". Mr Jacques Santer, president of the Commission, also protested.

The Irish presidency is pinning hopes of a deal on the Franco-German summit next Monday in Nuremberg, followed by a session of the monetary committee and a special EU finance ministers' meeting on the eve of the EU summit in Dublin on December 13-14. The odds must be on a deal, though German suspicions about political discretion polluting the economics of Emu remains as strong as ever.

Ian Davidson, Page 14  
Editorial Comment, Page 15  
**Lionel Barber**

## French MPs act on bank crisis

By Andrew Jack in Paris

The French parliament is to conduct an inquiry into the country's banks, the latest in a series of moves likely to shake up the sector significantly.

France's banks are in a crisis unrivalled since the end of the second world war, according to Mr Michel Péricard, leader of the Gaullist RPR group.

Two investigating judges have just been appointed to inquire into allegations of fraud and false information in the accounts of Crédit Lyonnais, the troubled state-owned bank during 1990-93.

Mr Jean Arthuis, the economics and finance minister, said in August that he had asked the justice ministry to determine whether action should be brought against former directors of the bank.

Mr Péricard said yesterday that the decision to establish the parliamentary inquiry had been taken before the latest appointments. But he cited Crédit Lyonnais (currently negotiating a new restructuring package with

the government), CIC bank (whose privatisation was recently called off) and Crédit Foncier de France (subject to a government takeover) as examples of the crisis in banking.

French banks not only faced the pressures of the globalisation of the capital markets, but also inflexible labour laws, and "collusion" between civil servants and the executives of large banks which "safeguarded neither the efficiency nor transparency" of choices made in the sector.

His comments echo the Senate's controversial report last month which called for sweeping reforms, including removal of a series of anti-competitive practices and inflexible legislation, and modification of the statutes of the Caisse d'Épargne savings bank.

Separately, Mr Alain Juppé, the prime minister, is considering appointing an independent figure such as Mr Dominique de La Martinière, author of a report earlier this year on tax reform, to examine the sector.

## OSCE agrees wider role as veto threat subsides

By Bruce Clark in Lisbon

A 54-nation summit agreed yesterday to work towards a new security system in Europe after a last-minute compromise in a row involving Armenia and Azerbaijan which threatened to derail the meeting.

Heads of government from North America, Europe and the former Soviet Union issued a mildly worded final statement on the promotion of "security and stability" in Europe which Azerbaijan had threatened to veto.

Member states of the Organisation for Security and Co-operation in Europe also pledged to boost the OSCE's efficiency as an instrument for preventing conflicts in partnership with other security bodies such as Nato and the Western European Union.

But the Azeri veto was lifted only after the OSCE's Swiss chairman, Mr Flavio Cotté, agreed to read out a statement regretting Armenia's refusal to accept a compromise proposal on the future of Nagorno-Karabakh.

Azerbaijan had earlier insisted that the final communiqué must include an explicit reference to the solution of the Karabakh problem on the basis of self-rule for the enclave under Azeri jurisdiction - an idea endorsed by an OSCE-sponsored mediation effort known as the Minsk group.

Armenia's President Levon Ter-Petrosyan rejected this proposal on the grounds that it would prejudice the solution of the eight-year-old conflict, which has cost 20,000 lives.

Diplomats said the tough stance by Azerbaijan, a mainly Moslem nation of 7m people which has signed oil contracts worth billions of dollars since gaining independence five years ago, was one of the big surprises of the Lisbon meeting.

They said the Azeri tactics reflected the growing self-confidence of President Heydar Aliyev, a veteran of Soviet politics who served in the Moscow Politburo but has kept his distance from Russia since gaining power in 1993.

There was deadlock on Monday after Azeri officials insisted that the Lisbon summit's final conclusion must include a clear affirmation of the territorial integrity of Azerbaijan. Armenian officials complained that the OSCE's Swiss presidency was making last-minute changes under Azeri pressure. They insisted that any settlement must enjoy the assent of Karabakh's ethnic Armenian leaders.

Diplomats said relations between Azerbaijan and Armenia, which have observed a ceasefire since 1994, took a turn for the worse last month when a dialogue about a possible joint approach to the Lisbon summit broke down.

Mr Malcolm Rifkind, the UK foreign secretary, affirmed Britain's commitment to the integrity of Azerbaijan, but expressed regret that it had broken off talks with Armenia.

President Aliyev strongly denied that his country had broken off bilateral contacts with Armenia and said he expected them to continue.

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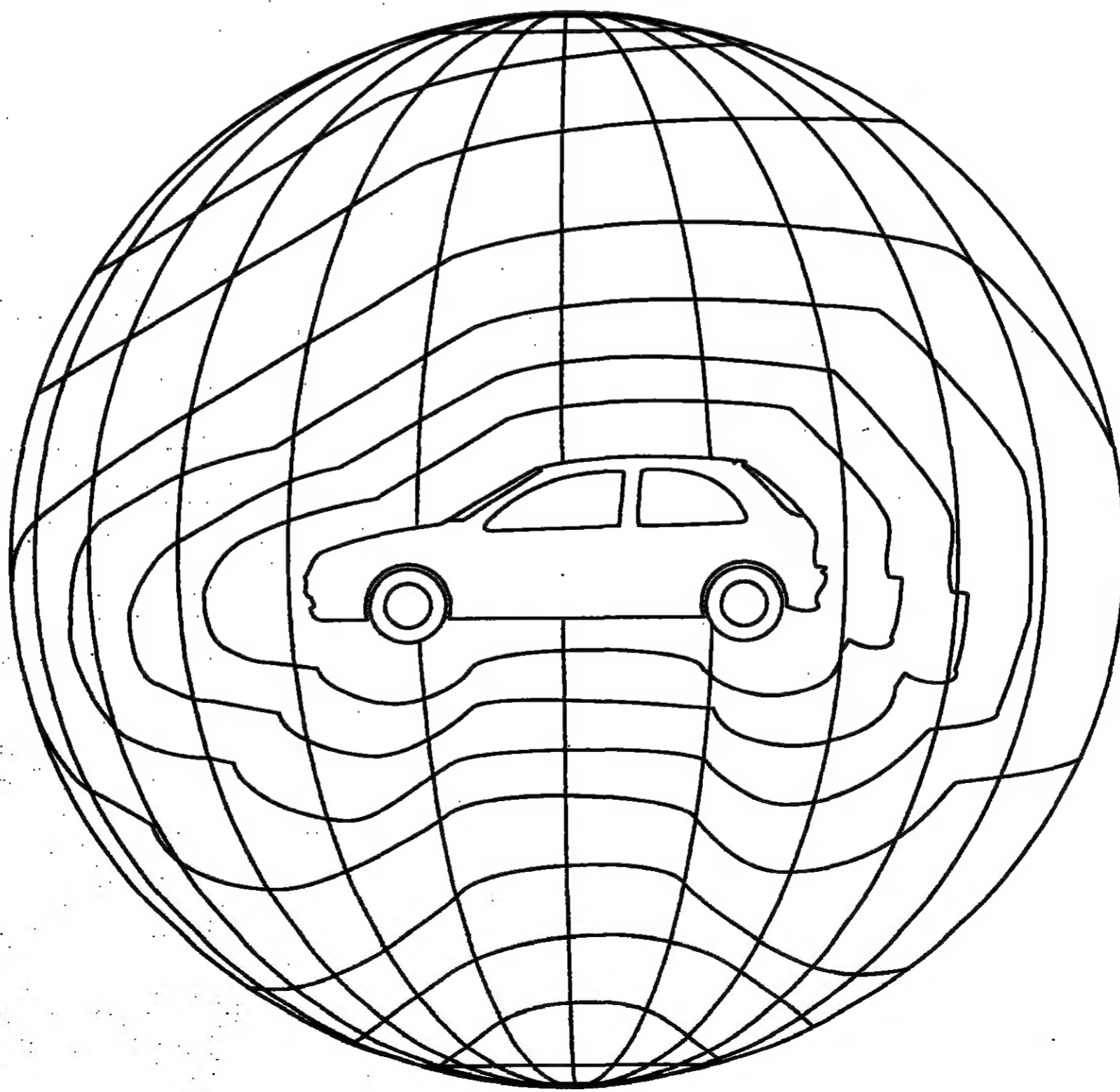
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## NEWS: ASIA-PACIFIC

## Japan recovery edges ahead but consumer boost falters

By William Dawkins in Tokyo

Japanese economic growth inched ahead at an annualised 0.4 per cent in the three months to September, in line with market expectations of a weak and poorly supported recovery.

This marks a turnaround from a revised 1.1 per cent annualised decline in gross domestic product in the previous quarter ending in June, according to data from the government's Economic Planning Agency (EPA) yesterday.

The yen weakened slightly to ¥114.2 to the US dollar, on the assumption that Japanese interest rates will be kept low to reinforce the recovery. The Bank of Japan's official discount rate has been kept at a record low of 0.5 per cent since September last year.

But economists and policy makers in Tokyo expressed disquiet over a slowdown in the growth rate of private consumption, which accounts for 60 per cent of the economy. Private con-

Corporate investment 'propping up economy' as worries about growth remain

sumption grew 1.9 per cent year-on-year, down from 3 per cent in the previous quarter.

GDP grew 3.3 per cent in the third quarter against the same period last year, slightly better than 3 per cent in the second quarter, but down on the 4.9 per cent of the first three months.

Private sector economists believe the economy will be close to the EPA's forecast of 2.5 per cent growth this fis-

cal year to next March.

One of the few strong points in the third quarter was corporate investment (15 per cent of the Japanese economy), up 6.4 per cent year-on-year, after a 5.5 per cent rise in the previous three months.

"The corporate sector is doing a great job propping up the economy, but there is very little else to propel it forward once the government stops spending," said

Mr Brian Pearce, chief economist at SBC Warburg Japan.

Exports rose, helped by a weak currency, by 1.9 per cent from the same period last year, after falling 1.3 per cent in the previous quarter. Imports rose 7.9 per cent, significantly slower than the 13.4 per cent growth of the second three-month period.

Mr Walter Mondale, US ambassador to Japan, yesterday warned that a slowdown

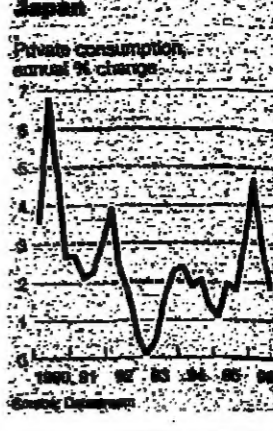
in Japanese demand for imports could arouse concern in the US over Japan's trade surplus.

"One of the problems right now is we're not sure how strong Japan's economic growth pattern is," he added. Residential investment was also strong, up by 20.2 per cent year-on-year after a 14.5 per cent increase in the second quarter, supported by a sharp rise in housing starts as would-be home

owners rushed to take advantage of low-cost mortgages.

Previous rises in housing starts have been barometers of increased consumer spending on white goods and furnishings. However, economists pointed out a rise in housing starts alone was not enough to bring a sustainable lift in personal consumption.

World Stock Markets, Page 96



Judicial noose tightens around ex-Sumitomo copper trader

## Hamanaka to face charge over illegal payment

By William Dawkins in Tokyo

Mr Yusuo Hamanaka, former star copper dealer suspected of losing \$2.6bn for Sumitomo Corporation, the Japanese general trader, was yesterday accused of receiving ¥20m (\$176,000) from a metals broker.

A spokesman for the Tokyo District Prosecutors' Office, which is holding Mr Hamanaka on two sets of charges of fraud and forgery, yesterday said he had received the cash while working for Sumitomo.

This is the first suggestion in the six-month inquiry into the biggest single financial loss in Japanese corporate history that Mr Hamanaka might have traded for personal profit. Mr Hamanaka has claimed all along that, while guilty of all charges made so far, he only traded on behalf of his company and not for personal gain.

The development tightens the judicial noose around Mr Hamanaka.

Prosecutors had earlier indicted Mr Hamanaka for fraud relating to the losses he is said to have notched up in a fruitless and unauthorized attempt to drive up copper prices. And he now faces a second court case, on top of a first trial for forgery, following his indictment last month on four charges of falsifying signatures on Sumitomo documents. Sumitomo is discussing with prosecutors a third possible charge of breach of trust.

Sumitomo hopes to ease the damage to its corporate image by pinning blame for the losses on Mr Hamanaka alone in a legal broadsheet.

But by the same token, the extra charges will give Mr



Hamanaka: personal gain?

Hamanaka's three lawyers greater opportunity to prove, as has been widely believed among copper traders, that he acted, contrary to Sumitomo's claims, with his boss's connivance.

Mr Hamanaka has so far kept his intentions quiet, beyond indicating he will plead guilty to all charges so far.

He has no cause to hurry. In the slow motion typical of Japan's judicial system, trials have been known to last for more than 10 years - coincidentally the maximum penalty for fraud.

Statistically, a suspect's legal defence has been shown to have little impact on the verdict.

More than 99 per cent of Japanese criminal trials result in convictions, partly a result of the care with which the authorities prepare their cases, but also because Japanese public prosecutors have traditionally held higher prestige and power than the judiciary.

Commodities, Page 28

## Vietnam debt may force reform pace

Donor meeting seen as test of resolve to push for change

Tomorrow's annual face-to-face meeting between Vietnam and its donors in the shiny opulence of Hanoi's only five-star hotel will represent a small coup for the Vietnamese. It is rare that developing countries host donor meetings on their own soil and this year's will be the first held in Vietnam.

But that will be the only cause for celebration. Foreign investors have become disillusioned with a country once hailed as a promising investment frontier, disbursement of official development assistance (ODA) is poor and doubt is growing over Hanoi's commitment to continuing economic reforms.

The fact that the country's 75-year-old president, Mr Le Duc Anh, lies ill in hospital is an unfortunate but poignant metaphor of the state of the country.

The donor meeting is seen as a crucial test of donor resolve to prompt moves towards deeper reforms, and of Hanoi's willingness to respond. It is a challenge that neither side appears ready to tackle head-on.

"Nobody here believes that the Vietnamese do anything in a hurry. The government has a strong sense of ownership over the reform process. And there's no desire on the part of donors to undermine that," says a western diplomat in Hanoi.

Diplomats say many donors are expected to raise concerns about the pace of the country's 10-year-old reforms. But most are too pre-occupied with harnessing the bilateral relations to be interested in helping to finance a collective message

with real impact. "There are some observers who feel that maintaining political stability is more important than a great level of investor comfort," says a European diplomat.

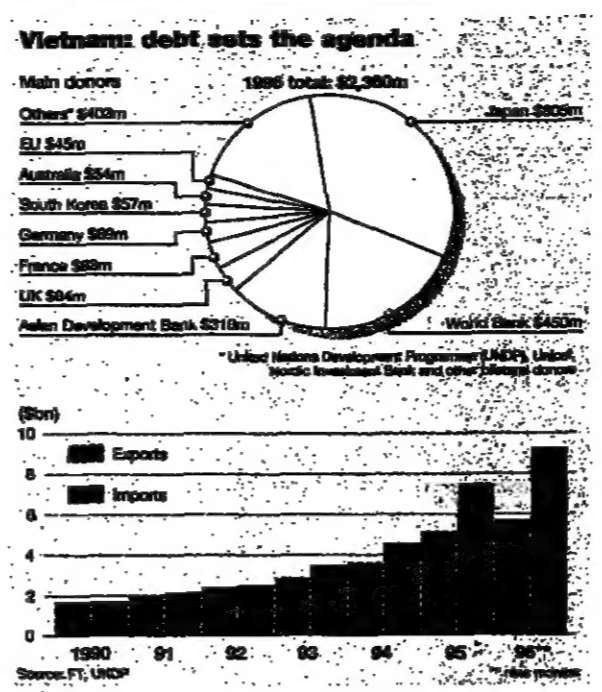
Many observers were surprised in June when the World Bank announced it would be prepared to extend \$1.5bn to Vietnam, making the Communist-run country the second largest recipient of Bank funding after India. That led to suggestions the Bank is taking a soft line on Vietnam, which its officials deny.

The Bank has said it would like to see encouragement of the private sector in order to spur domestic investment, stimulate exports and job creation. Some in the government, including Mr Vo Van Kiet, the reformist prime minister, have shown support for that view.

But powerful communist party interests still regard private businesses with ideological distaste and maintain discriminatory controls on small businesses that favour loss-making state companies.

In any event, multilateral donors are concerned that anything approaching table-thumping by donors would only accentuate the divisions within the Vietnamese administration over whether further reform is needed at all.

However, the state of Vietnam's debt profile may force the issue. Economists warn that without taking urgent action on its rising debt, the country risks not being able to finance the next stage of reforms.



Vietnam is already running a trade deficit of \$3.5bn and a current account deficit expected to be around 12 per cent of gross domestic product this year. Hanoi has also yet to repay \$900m in commercial arrears.

"They [the Vietnamese] have only got one shot at it. There's already a debt stock. If they don't sort out these problems now, debt will prevent them furthering reform," says one foreign economist.

Critics of current policy point to a number of structural problems that could drive Vietnam further into debt if not dealt with now.

The first is the authorities' instinct to use administrative controls - such as restricting letters of credit - to stem imports rather than boosting exports.

That, say economists, could be done by abandoning a commitment to import-substitution, dropping an export quota system that discriminates against private exporters and reforming the state sector, in which the party has a large economic stake.

Another problem is the environment for foreign investors, which has seen little improvement. Foreign fund inflows are dipping, with one newspaper last week reporting that Ho Chi

Minh City had received 50 per cent fewer pledges so far this year than the same period last year.

This will hinder Hanoi's ability to finance its trade deficit at a time when its needs indicate it should at least double current foreign investment figures.

In addition, foreign investment itself is emerging as a source of debt. About 95 per cent of joint ventures are with state-owned companies, many of which borrow from state-owned banks. "The borrowing of state enterprises, especially in joint ventures... need to be monitored as these borrowings could develop into public sector liabilities and undermine Vietnam's creditworthiness," according to the World Bank.

Against this backdrop, Hanoi will tell the donors that it needs \$41bn between now and 2000 to maintain growth and install essential infrastructure.

Economists say that whether it achieves those goals will depend largely on whether the authorities can reconcile their internal differences in time. "There are people who want to do the right thing. But there's a struggle of ideas," says one.

Jeremy Grant

## ASIA-PACIFIC NEWS DIGEST

## Malaysia seeks Asia rail funds

Malaysia is to start seeking international consortia to fund and build the Trans-Asia railway through south-east Asia. The project was approved at the Association of South-East Asian Nations summit in Bangkok last year. Malaysia's transport minister Ling Liong Sik said yesterday the feasibility study had not yet been carried out, but the regional working group Malaysia headed was keen to tap interest from potential builders.

Originally the route would have linked Singapore with Kunming, south China, but countries such as Laos and Burma have expressed interest. Several stretches have been tentatively identified: from Phnom Penh to Ho Chi Minh City, and from Nam Tok in Thailand to Yunnan, linking Rangoon to the main line. Financing, likely to total \$4bn, is not yet settled. James Kyne, Kuala Lumpur

## Burma protesters dispersed

Riot police dispersed Burmese students yesterday after they staged all-night demonstrations critical of the country's military regime at various points around Rangoon. The protests, involving as many as 2,000 students and supporters, were the largest since 1988, when hundreds of thousands took to the streets to call for the overthrow of the military junta, and thousands were killed.

While student leaders said the demonstrations were "non-political" and had no connection with opposition leader Ms Aung San Suu Kyi and her National League for Democracy, they also chanted anti-government slogans. Roadblocks preventing access to Ms Suu Kyi's house were erected during the demonstrations and remained after the protests were broken up.

Ted Bardack, Bangkok

## Thai prices up 5.9%

Thailand's consumer price index rose an average 5.9 per cent during the first 11 months of this year compared with the same period last year, commerce minister Narongchai Akkrasit said yesterday. The Bank of Thailand earlier this year forecast that the index for the whole of 1996 would increase by about 5.5 per cent from last year. However, the bank has revised upwards its estimate to 5.7-5.8 per cent.

Agencies, Bangkok

## Pakistan rejects US criticism

Pakistan yesterday rejected US criticism of Sino-Pakistan co-operation in the peaceful use of nuclear technology, saying it did not violate any international law. The Pakistan comment was in response to a statement by a US state department spokesman yesterday discouraging any nuclear dealings between the two nations. China is building a 300 MW nuclear power station at Chasma in Pakistan's Punjab province. The power plant is expected to be completed by the end of 1998.

Meanwhile, at least three people were injured when a car bomb exploded yesterday outside a shopping complex in Lahore during a visit by Chinese president Jiang Zemin. The Chinese president was on a tour of historical sites in the city.

Agencies, Islamabad and Lahore

Editorial Comment, Page 15

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\*Interest is paid quarterly. Interest is paid half-yearly.

- Interest is payable on account balances below the minimum level at a gross rate of 1% p.a. (Gross C.A.R. 1%).
- Interest will be paid after deducting tax (where applicable) at the prescribed rate, subject to status for tax purposes.
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## CONTRACTS &amp; TENDERS



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RAHIBULLAH COASTAL POWER (Pvt) COMPANY  
SPECIFIC PROCUREMENT NOTICE  
INVITATION TO BIDDERS

Rahibullah Coastal Power (Pvt) Company (RCP) will build, own and operate (BOO) a 140 MW BCO cogeneration gas turbine cycle power plant to be located near the city of Quetta in northwest Pakistan in the province of Balochistan. FiatAvio S.p.A. of Italy has been selected as the EPC/Turnkey Contractor for this private sector power project.

RCP has applied for a loan from the Long Term Credit Fund (previously Private Sector Development Fund), of the Government of Pakistan (GDP), secured from the World Bank and administered by the National Development Finance Corporation (NDFC) in various extensions towards the one of the Rahibullah Coastal Power Project in Pakistan, and it is intended that part of the proceeds of this loan will be applied to eligible payments under various procurement contracts.

FiatAvio S.p.A. now invites sealed bids from qualified suppliers from eligible member countries of the World Bank and Taiwan, China for:

"Supply of Electrical, Mechanical and Instrumentation Erecting Works (SMEI) No. 05-FA"

which will be financed by this loan, and for which procurement will be managed directly by FiatAvio S.p.A., using World Bank procurement procedures for International Competitive Bidding (ICB) as specified in the World Bank's Guidelines: Procurement under IBRD Loans and IDA Credits and is open to bidders from eligible source countries as defined in the guidelines.

Minimum bidder qualifications include: i) experience in mechanical, electrical and instrumentation of power generation cycle power plants; ii) at least one of the contracts from the reference list must have the following characteristics: minimum value of US\$ 4 million; minimum 10 months for the execution of such projects; size similarity (200 tons of pipes, 200 ton boiler, 200 tons of steel structure); iii) proof of property (free from leasing conditions) can be accepted only for Pakistan. Bidders of a minimum quality of equipment for erection as stated in the bidding documents; iv) proof that bidder's QA/QC system is consistent with internationally accepted practices.

A complete set of bidding documents will be available for purchase starting from December 4, 1996 by interested eligible bidders upon submission of written application and payment of a non-refundable fee of US\$ 200 by wire transfer to the below address.

Bids must be delivered to FiatAvio offices on or before 12:00 noon (local time) on January 21, 1997 and must be accompanied by a security of US\$ 100,000 in a form as detailed in the Section VI, Sample Forms. Bids will be opened in the presence of bidder's representatives who choose to attend at 12:00 noon (local time) on January 21, 1997 at FiatAvio offices. In order to be considered qualified, bids must include a detailed capability statement whose requirements will be included in the Instructions to Bidders.

Please direct all inquiries and submissions to:  
FiatAvio S.p.A.  
Cao Farnesi, 112, 10138 Torino, Italy  
Attn: Raffaele Adorno  
Procurement Department  
Tel: +39 11 655429 - Fax: +39 11 655216  
Telex: 221320

Please direct the payment of US\$ 200 non-refundable fee to:  
Credito Italiano  
Via Arona, 23, 10121 Torino, Italy  
ASB 02008 - CAB 01000  
Account n° 1010100 - Beneficiary: FiatAvio S.p.A.  
Wire Transfer Subject:  
Rahibullah Coastal Power Project, Loan n° 3812-PAK, ICB No. 05-FA

The City of Klaipeda and the Republic of Lithuania  
announce an international competition for the  
Management of Klaipeda Free Economic Zone

Klaipeda - a convenient point on East-West crossroads on the Eastern Baltics, the center of West Lithuania with an ice-free port, a city with a developed transport infrastructure and qualified labour resources is looking for a reliable company to hold office for the management of Free Economic Zone. The Free Economic Zone (205 ha) is the space for perspective business, production and transport development in privileged conditions.

The government of the Republic of Lithuania and the city of Klaipeda invite interested parties to participate in the competition for preparation of the best Business Plan and the Statute of the Zone and to form the Consortium's Group. The documents of the participants of the international competition are accepted from 20 November, 1996 until 20 March 1997.

Precondition for the participation is an official application of the company and the bill of application fee of LT 1,000 (US\$ 250) transferred to: Municipality account no. 142 023 (currency account no. 11 070 919) Klaipeda Department of Lithuanian State Commercial Bank, 1 Turgasu Str., Lithuania - 5800 Klaipeda.

The application and the bank transfer confirmation should be sent with indication "Documents for International Competition on Klaipeda Free Economic Zone" to the address:  
The Municipality of Klaipeda, Room no. 120, Liepu 11, Lithuania - 5800 Klaipeda

Detailed information: Municipality, Foreign Relations Dept.: Tel/Fax: +37 06 21 47 95, Tel. +37 06 25 99 79

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## GOVERNMENT OF ROMANIA

## MINISTRY OF HEALTH

The Ministry of Health of Romania, based on the Governmental decision No. 909/1996 that guarantees the importation of the equipment for radiology, now invites qualified firms to an International Competitive Bidding for the purchasing.

Interested firms can obtain more information and purchase the Bidding Documents from Ministry of Health - Department of Bidding - starting from December 4, 1996. Bidding documents can be purchased for a non-refundable fee of 200 USD.

The deadline for submission of bids is 16 December, 1996 at 13:00 hours (local time). Bids should be submitted to the Registration Office of the Ministry of Health, on or before the time established for the deadline.

Bids will be opened on 16 December, 1996 at 13:30 hours (local time).  
Ministry of Health of Romania - Str. Ministerului 1-3, Sector 1, 70109 Bucharest - ROMANIA tel/fax (401) 615 61 92.

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## AMERICAN NEWS DIGEST

## Four on price fixing charges

A federal grand jury in Chicago yesterday charged three former top executives of Archer Daniels Midland with price fixing in the \$600m annual market for lysine, an animal feed supplement. A Japanese executive for Ajinomoto was also charged, while Chell Jedang, a South Korean company, agreed to plead guilty and pay a \$1.25m fine for its role in the scheme.

The charges are the first in a two-year investigation of ADM's pricing practices in world markets for lysine, citric acid and corn syrup. ADM pleaded guilty in October to price-fixing charges and agreed to pay a record \$100m criminal fine and co-operate with any further government prosecutions.

Ajinomoto and two South Korean companies - Kyowa Hakko Kogyo and Sewon America - also pleaded guilty and agreed to pay fines earlier this year, avoiding trial. The four executives indicted yesterday were not protected by those settlements. They are Mr Michael Andreas, ADM's executive vice-president and son of company chairman Dwayne Andreas; Mr Terrance Wilson, former president of ADM's corn processing division; and Mr Mark Whitacre, former president of ADM's bioProducts division, who acted as a government informant in the case.

Mr Kazutoshi Yamada, managing director of Ajinomoto and a resident of Tokyo, was also charged. If the cases proceed to trial, secret video tapes of meetings where price-fixing was allegedly discussed could be introduced as evidence. ADM issued a statement of support for Mr Wilson and Mr Andreas.

Laurie Morse, Chicago

## Bloc Quebecois leader quits

Tensions in the Bloc Quebecois, the party representing Quebec separatists in the Canadian parliament, have burst into the open with the resignation of Mr Michel Gauthier, the BQ's leader. Mr Gauthier, who held the job for only nine months, is also leader of the official opposition in the House of Commons, the BQ having captured 54 out of 295 seats in the 1993 general election.

The BQ has struggled since the departure last year of its charismatic founder, Mr Lucien Bouchard. Now premier of Quebec, he has undercut the BQ's raison d'être by playing down the drive for independence in favour of deficit-cutting and other economic issues. Although the BQ remains the most popular federal party in Quebec, support for the Liberals, led by Mr Jean Chrétien, prime minister, has gradually risen. Mr Gauthier will remain at the helm until next March.

Bernard Simon, Toronto

## Fraud convictions overturned

The legal battle that followed the collapse of the US savings and loan industry in the late 1980s has reopened with the overturning of more than 70 convictions for fraud and racketeering made against Mr Charles Keating, former head of the Lincoln Savings and Loan Association, in 1993.

Ms Mariana Pfaltzer, the federal judge who sentenced Mr Keating in 1993, ruled on Monday in a Los Angeles hearing that his convictions were tainted because three of the 12 jurors in the case knew about a previous conviction against him. Total losses to taxpayers from the collapse of Lincoln, which had invested in high-risk land, hotel and securities deals, were estimated by the government at \$1.4bn. Mr Keating's earlier conviction, for swindling elderly investors, was made in 1981, and overturned in April this year because of errors in the judge's instructions to the jury. Mr Keating yesterday said he was "delighted".

John Authers, New York

## MasterCard sues Amex

MasterCard International, the card association, yesterday stepped up the legal battle over attempts by American Express, its competitor, to build relationships. It sued both Amex, a Pennsylvania-based bank, and American Express, claiming that a promotion which offered American Express loyalty bonus points for purchases made with MasterCard cards infringed its trademark. American Express, which has changed its long-term strategy of direct sales in recent months in favour of trying to work through banks, described the move as "anti-competitive".

It has already successfully taken on Visa in legal actions over its right to do business with banks in the EU and Latin America.

John Authers

## US indicators show moderate growth

By Gerard Baker  
in Washington

Fears the US economy might be entering a fresh phase of accelerating growth were dampened yesterday with the publication of two reports suggesting the expansion remains moderate.

The index of leading economic indicators, published by the Conference Board, a private sector research group, nudged upwards in October. The index, a good predictor of economic conditions in six to nine months' time, rose by 0.1 percentage point to 103.6. It was the

ninth consecutive month in which the index has increased, and followed a revised 0.2 percentage point gain in September.

The report measures a range of indicators that point to the future pace of economic activity. Sharp increases in equity prices and a faster rate of new orders for consumer goods were the principal factors behind the increase in October, but there was also steady growth in commodity prices and order backlogs, while unemployment benefit claims fell. The only weak spots were a shorter factory working week, fewer orders

for new plant and equipment and reduced applications for building permits.

The Conference Board's indices of coincident and lagging indicators both fell in October, reflecting the slowing of demand in summer and autumn.

Meanwhile, the Commerce Department reported a big drop in new home sales in October. Sales fell to a seasonally adjusted annual rate of 714,000, a decline of 8.7 per cent from the previous month, the sharpest fall in seven months. That followed a downward-revised 4.5 per cent decline in September. All regions of the

country reported falls.

But both reports suggest the economy continues to enjoy a moderate rate of expansion in the final few months of the year, with little risk of inflation. The fall in new home sales represents a cooling-off from rapid growth in demand earlier in the year while the index of leading indicators points to a continuing gentle rate of growth.

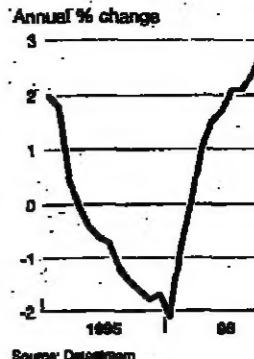
Gross domestic product grew at an annual rate of 4.7 per cent in the second quarter, setting off alarms that growth might prove unsustainable. But the rate slowed to 2 per cent in the July to

September period, more in line with the economy's long-run potential.

That deceleration was sufficient to dissuade the Federal Reserve from raising interest rates over the last three months. Most indicators so far in the final quarter of the year suggest the slower pace is continuing, placing no pressure on the central bank to tighten monetary policy at the next meeting of its policy committee in two weeks.

Fears persist that rapid growth in consumer spending could put upward pressure on prices and much attention in the next month

## US Index of Leading Economic Indicators



will focus on the performance of retail sales.

## President Zedillo sacks his chief law enforcement officer after a series of embarrassing leaks

## Setback for Mexican drive on judiciary

When President Ernesto Zedillo appointed his attorney general from an opposition party on taking office two years ago he was underlining a commitment to an independent judiciary.

The sacking on Monday night of his chief law enforcement officer following a series of setbacks and embarrassing leaks in the investigation of two prominent political assassinations is a blow to that commitment.

Mr Antonio Lozano Gracia was the only member of the opposition National Action party (PAN) in Mr Zedillo's cabinet, and it turned out to be a controversial appointment. Mexico's ruling party bitterly resented the loss of such a prominent post to an opposition figure: the attorney-general is also the country's top anti-narcotics officer. From the outset, Mr Lozano was subjected to smear campaigns and weekly protests outside his offices

by members of the Institutional Revolutionary party (PRI).

Mr Lozano was replaced by Mr Jorge Madrazo Cuellar, an independent lawyer who headed the government's Human Rights Commission. Mr Madrazo has earned a reputation for thoroughness, particularly after exposing doctored video-tapes which attempted to cover up police involvement in a peasant massacre in the state of Guerrero last year.

Mr Lozano's dismissal on Monday appears to have caught both him and Mr Felipe Calderón, the PAN leader, off-guard. But given the distrust Mr Lozano provoked within the PRI, it did not altogether come as a surprise.

Mr Calderón said Mr Lozano's dismissal was typical of Mr Zedillo's "insensitive, disorderly and inappropriate" handling of government affairs. He praised Mr Lozano for his efforts to root out corruption within the crime and anti-nar-



Zedillo: unhappy outcome

cotics squads under his command.

Government officials denied Mr Lozano's dismissal had been prompted by party political considerations ahead of Mexico's mid-term elections next year. They said Mr Lozano was fired for incompetence.

"It was not only the meagre results in the murder investigations," a senior government official said. "The constant leaks to the press caused a lot of damage. They undermined Mexico's image abroad."

Mexico, the official said, had lost important extradition cases because of the attorney-general's shoddy legal work. Incompetence had also allowed several fugitive bankers and businessmen, wanted in Mexico for multi-million dollar frauds, to evade extradition. "The president expects a better handling of the business of the attorney-general's office," he said.

Mr Lozano was assigned the task of solving two highly sensitive political assassinations. Mr Luis Donaldo Colosio, the ruling party's presidential candidate, was shot while campaigning in the northern city of Tijuana in March 1994. Six months later, Mr José Francisco Ruiz Massieu, the PRI secretary-

general, was also murdered in broad daylight outside a Mexico City hotel.

Mr Lozano failed to unravel either case. His prosecutors tried to prove Mr Colosio's murder was the product of a conspiracy, but saw their cases against several suspects collapse in court. Four successive special prosecutors have now handled the Colosio investigation, with no visible results except the imprisonment of one confessed gunman.

The inquiry into the murder of Mr Ruiz Massieu, which led to the arrest on murder charges of Mr Raúl Salinas, the elder brother of former president Carlos Salinas, has also floundered from lack of hard evidence.

Mr Pablo Chapa Bezanilla, the special prosecutor in the Ruiz Massieu case, was also fired on Monday amid allegations he had tampered with evidence and coaxed witnesses to hear false testimony.

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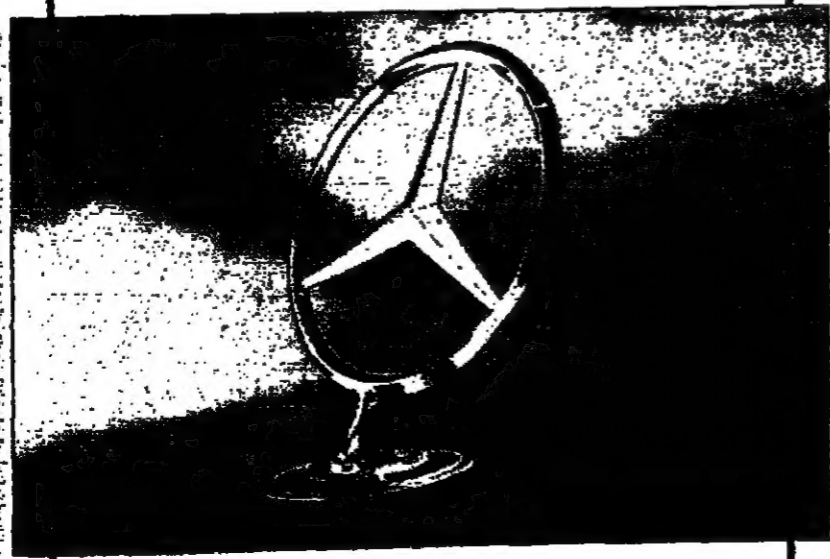
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## NEWS: INTERNATIONAL

## Africans join the scramble for UN top job

Clutch of candidates emerge as OAU abandons support for Boutros Ghali

By Michael Littlejohns, UN Correspondent in New York

The decision of the Organisation of African Unity to abandon its exclusive backing for Mr Boutros Ghali as its candidate for secretary-general of the United Nations has opened the field to other African candidates.

While the OAU backed the reappointment of Mr Boutros Ghali, who was vetoed by the US a fortnight ago, other African aspirants had been unable to let their names go forward.

Half a dozen of them, perhaps more, are waiting for an opportunity to make their bid. The OAU move was motivated by fears that Africa risked losing the top UN job if the case for reappointing

Mr Boutros Ghali was pressed to the exclusion of others.

What appears to be shaping up is a fierce contest not only among individuals but also between the US and France. The Sorbonne-educated Mr Boutros Ghali was the candidate of his socialist friend President François Mitterrand five years ago. He won largely because, at the time, neither the US nor Britain could come up with an alternative African acceptable to all five permanent members, including Russia and China.

Although candidates from all parts of the world are still in the running, Africans believe it is their turn to provide a secretary-general as every other region has had at least two turns at the job.



Amara: career official



Salim: reluctant



Machel: uninterested

The problem is that no candidate wants to be seen as too much of a favourite of any particular major power, especially not the US, which has gone out of its way not to propose anyone or even indicate any preference.

However, two potential candidates among those most often mentioned are believed to find favour in Washington. They are Mr Kofi Annan of Ghana, a

career UN official who heads peacekeeping operations; and Mr Olara Otunnu, a former chief delegate of Uganda and now a citizen of the Ivory Coast who is serving as president of the New York-based International Peace Academy.

As president of the Security Council in 1971, Mr Otunnu devised an ingenious formula for breaking the deadlock after China

used its veto 16 times to block the reappointment of Mr Kofi Annan. Mr Otunnu determined through a straw poll that Mr Javier Pérez de Cuellar of Peru could win. He was duly appointed and Mr Paolo Fulci, the council's Italian president, may well repeat the device in the next few days.

In the meantime, more than 40 African heads of

state will have met in Burkina Faso under the auspices of President Jacques Chirac of France, who is desperately eager to retain the UN post for an official fluent in French.

Britain, however, is among members making the case that since a francophone African has had five years there is no reason why fluency in French should be obligatory for any successor from a multilingual continent.

The French are said to be satisfied with Mr Annan's linguistic credentials and Mr Otunnu is also thought to be acceptable. But Mr Amara Essy, foreign minister of the Ivory Coast, is a declared candidate, making it difficult for his adoptive compatriot to run, unless Mr Essy is vetoed.

Mr Hamid Algabid of Niger, secretary-general of the Organisation of the Islamic Conference; Mr Salim Abdullahi of Somalia, head of the OAU secretariat and a former candi-

date; Mr Moustapha Niasse, foreign minister of Senegal; and Mr Wally N'dow of Gambia, secretary-general of the UN agency Habitat, are all considered potential contenders.

Senegal has diplomatic relations with Taiwan, which would count against Mr Niasse. Mr Salim is reported to be reluctant to enter the race, having been vetoed previously by the US in retaliation for his successful efforts as a UN delegate to thwart American designs on the China representation issue 25 years ago.

Also mentioned is Mrs Graca Machel, widow of the first president of Mozambique, but African officials say she has little interest in becoming the UN's first woman secretary-general.

Whoever it is, Mr Fulci and Mr Razali Ismail of Malaysia, president of the General Assembly, which must endorse the eventual nominee, have both set a deadline of December 17 for a decision.

## INTERNATIONAL NEWS DIGEST

## 'Hijack' claim in database talks

Sports fans, scientists, librarians and software developers in the US have formed an unlikely alliance to oppose a proposed treaty to protect databases being discussed at a United Nations conference in Geneva.

The critics say the draft treaty is too sweeping and could inhibit scientific and technical research, restrict access to information, and inhibit development of the Internet.

The draft pact, one of three due for adoption at a World Intellectual Property Organisation conference that runs to December 20, would establish a special form of protection for databases even if they did not contain copyright material, provided they involved "substantial investment" of resources.

Opponents of the draft complain it has been "hijacked" by a few database compilers, notably West Publishing, a Canadian company with a virtual monopoly on publishing US court opinions, and has not been subject to proper review and discussion.

Noting that there are no provisions for "fair use" or other exceptions allowed for in copyright law, they argue that the treaty as drafted could give database owners monopoly rights over the facts contained in the databases.

Thus West Publishing could insist that any users of US court opinions must seek authorisation. Frances Williams, Geneva.

## Elf and Total in Iraq negotiations

Elf Aquitaine and Total, the French oil and gas groups, have confirmed they are in talks with Iraq to buy crude oil under the United Nations oil-for-food plan. Neither company, however, has so far signed a contract.

Total yesterday said it was negotiating to buy 30,000 b/d. Elf declined to say how much oil it was seeking from Baghdad. Under the UN plan, Iraq will be able to sell \$2bn-worth of oil every six months.

Iraq yesterday said it had signed 50 deals to sell crude oil, although it has not named any buyers. Officials in Baghdad said loading of the first tankers could begin as early as next week. David Owen, Paris, and Robert Corzine, London.

## Netanyahu predicts big boost to Israeli economy

By Bruce Clark and Peter Wise in Lisbon and Judy Dempsey in Jerusalem

Mr Benjamin Netanyahu, the Israeli prime minister, yesterday claimed Israel's economy would quadruple in size and could become one of the 15 richest nations in the world by 2010.

Speaking at the European security conference in Lisbon, a largely political gathering, he said his vision of the future was based on Israel's commitment to peace and free markets from

which prosperity would result. His words could rattle those back in Israel, where industry and foreign investors are waiting for Mr Netanyahu to put aside his rhetoric and deliver on his election promises of capital markets reform, privatisation and a commitment to cut the budget deficit.

Mr Netanyahu said his country's population and gross domestic product per capita would both double by the year 2010 as foreign investors, confident of Israel's commitment to

peace, rushed to take part in an "unprecedented technological revolution".

And in a strident rebuttal of the widespread charge that his government was stalling on reconciliation, he said the steady rise in foreign investment was a sign of international confidence in his country's continuing stability. Foreign investment had grown 30 per cent this year compared with 1995, and gross fixed capital investment was up 12 per cent, despite big budget cuts because of overspending.

However, since the spate of bombings earlier this year and the violence between Israeli and Palestinian forces, the Mishkani, the 100 share index of the Tel Aviv Stock Exchange, has lost over 12 per cent as foreign investors have remained on the sidelines.

Furthermore, no budget cuts have been introduced so far and analysts have pointed out that the budget deficit for the first 10 months of 1996 reached Shk9.5bn (\$3bn), exceeding the whole of 1995.

Mr Dan Meridor, the Israeli finance minister, yesterday confirmed the deficit would this year exceed 4 per cent of gross domestic product, making it more difficult to introduce budget cuts aimed at bringing the deficit down to the government's target of 2.5 per cent of GDP next year.

"We're going to make peace and prosperity happen," added Mr Netanyahu. "The prosperity will strengthen the peace and the peace will strengthen the prosperity. Nothing remains

that cannot be resolved if there is a decision on the Palestinian side to resolve it." He insisted the Palestinian side was holding up final agreement on the Israeli army's withdrawal from the West Bank town of Hebron - a deal which he described as 99 per cent complete.

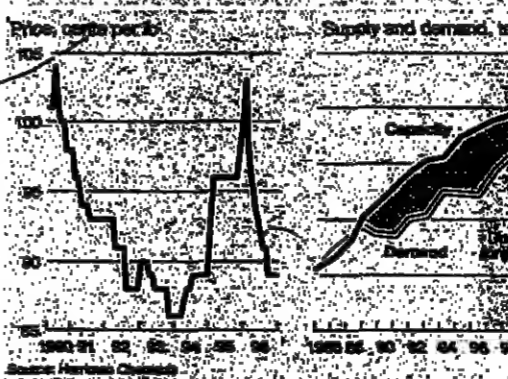
However, European diplomats gave a more downbeat assessment of the Israeli leader's meetings in Lisbon. Mr Jacques Chirac, the French president, is understood to have pressed him to make a gesture towards

peace and said fresh violence could break out because of the lack of progress.

Mr Chirac also called for a resumption of talks between Israel and Syria, and warned that fresh Israeli settlements on the West Bank were sending a "bad signal" to the Palestinian side.

Mr Netanyahu said the Oslo peace accords did not deny Israel the right to establish settlements - and that his government was proceeding more slowly with settlements than its Labour predecessor.

## Titanium Dioxide covering the investment



## DuPont seeks to reverse fall in global price of key chemical

By Jerry Luesby in London

DuPont, the world's largest producer of titanium dioxide, is to raise its prices on January 1, in an effort to lift the huge commodity industry out of the doldrums.

Titanium dioxide, with global sales of more than \$7bn a year, is the main ingredient in paint and paper coatings. It is also used to colour plastics. Prices for the chemical have fallen sharply this year, largely due to oversupply after producers expanded their manufacturing plants during a period of stagnant demand.

With suppliers competing for customers, US prices have fallen by 13 per cent and European prices by nearly 20 per cent.

This has knocked profits at chemical companies such as DuPont and ICI, as well as SCM, which was spun off by Hanson this year into Millennium Chemicals.

SCM has already tried to increase prices, in an effort to restore investors of the strength of business ahead of Millennium's October flotation. But a price rise due on the day of the flotation proved impossible to implement, said Mr Bill Landuyt, chief executive.

DuPont may fare better. It holds 25 per cent of the world's titanium dioxide market, compared with 14 per cent by ICI and 12 per cent by Millennium.

"If anybody can get a price rise, it will be DuPont," said Mr Roger Pechey of chemical industry consultants Harriman Chemsult.

DuPont plans to increase its US prices by 4.5 per cent on January 1, and European prices by between 5 and 8 per cent.

However, it will not be lifting prices in Asia until at least the second quarter of next year.

The company estimates that Asian titanium dioxide demand fell by 1.5 per cent this year.

Previously, demand for the chemical has always grown in the region, and producers had been forecasting regional demand growth of 7 per cent a year from 1995 until 2000.

"The region is beginning to show signs of becoming a mature economy," said Mr David Young, marketing manager for DuPont's white pigments business. This year's slowdown in South Korea and Taiwan had depressed sales by more than the continuing expansion in south-east Asia economies, he said.

At the same time, demand was stagnant in Europe, and fell by an estimated 1.2 per cent in North America. Only in South America, which accounts for about 5 per cent of the global market, was there any growth in demand - by an estimated 0.3 per cent.

The pain, for producers, is becoming unbearable. Titanium dioxide prices had "declined by unrealistic amounts in 1996," said Mr Young.

Many chemical companies were running their titanium dioxide businesses at, or close to, a loss. "Prices need to rise significantly if producers are to survive and invest for the future," he said.

However, industry analysts suggest that a sustained price recovery is unlikely while there is such considerable oversupply.

Historically, titanium dioxide prices have only risen when producers were using more than 87 per cent of their available manufacturing capacity.

Currently, they are using about 85 per cent, despite plant closures and delayed expansion plans aimed at easing the oversupply.

The Mozambique Channel ■ Six Gencor geologists spend five years ducking malaria on the remote northern coast ■ What they fish is what's for dinner ■ Lunch ■ And breakfast ■ What they prospect on the dunes is what will soon further boost Gencor's position as one of the world's leading producer of titanium mineral sands ■ GENCOR ■ IT'S NOT BUSINESS AS USUAL



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Prices for titanium dioxide (in \$/tonne) for the month of December 1996. Prices are quoted for 100% pure, 99.9% pure, 99.5% pure, 99.0% pure, 98.5% pure, 98.0% pure, 97.5% pure, 97.0% pure, 96.5% pure, 96.0% pure, 95.5% pure, 95.0% pure, 94.5% pure, 94.0% pure, 93.5% pure, 93.0% pure, 92.5% pure, 92.0% pure, 91.5% pure, 91.0% pure, 90.5% pure, 90.0% pure, 89.5% pure, 89.0% pure, 88.5% pure, 88.0% pure, 87.5% pure, 87.0% pure, 86.5% pure, 86.0% pure, 85.5% pure, 85.0% pure, 84.5% pure, 84.0% pure, 83.5% pure, 83.0% pure, 82.5% pure, 82.0% pure, 81.5% pure, 81.0% pure, 80.5% pure, 80.0% pure, 79.5% pure, 79.0% pure, 78.5% pure, 78.0% pure, 77.5% pure, 77.0% pure, 76.5% pure, 76.0% pure, 75.5% pure, 75.0% pure, 74.5% pure, 74.0% pure, 73.5% pure, 73.0% pure, 72.5% pure, 72.0% pure, 71.5% pure, 71.0% pure, 70.5% pure, 70.0% pure, 69.5% pure, 69.0% pure, 68.5% pure, 68.0% pure, 67.5% pure, 67.0% pure, 66.5% pure, 66.0% pure, 65.5% pure, 65.0% pure, 64.5% pure, 64.0% pure, 63.5% pure, 63.0% pure, 62.5% pure, 62.0% pure, 61.5% pure, 61.0% pure, 60.5% pure, 60.0% pure, 59.5% pure, 59.0% pure, 58.5% pure, 58.0% pure, 57.5% pure, 57.0% pure, 56.5% pure, 56.0% pure, 55.5% pure, 55.0% pure, 54.5% pure, 54.0% pure, 53.5% pure, 53.0% pure, 52.5% pure, 52.0% pure, 51.5% pure, 51.0% pure, 50.5% pure, 50.0% pure, 49.5% pure, 49.0% pure, 48.5% pure, 48.0% pure, 47.5% pure, 47.0% pure, 46.5% pure, 46.0% pure, 45.5% pure, 45.0% pure, 44.5% pure, 44.0% pure, 43.5% pure, 43.0% pure, 42.5% pure, 42.0% pure, 41.5% pure, 41.0% pure, 40.5% pure, 40.0% pure, 39.5% pure, 39.0% pure, 38.5% pure, 38.0% pure, 37.5% pure, 37.0% pure, 36.5% pure, 36.0% pure, 35.5% pure, 35.0% pure, 34.5% pure, 34.0% pure, 33.5% pure, 33.0% pure, 32.5% pure, 32.0% pure, 31.5% pure, 31.0% pure, 30.5% pure, 30.0% pure, 29.5% pure, 29.0% pure, 28.5% pure, 28.0% pure, 27.5% pure, 27.0% pure, 26.5% pure, 26.0% pure, 25.5% pure, 25.0% pure, 24.5% pure, 24.0% pure, 23.5% pure, 23.0% pure, 22.5% pure, 22.0% pure, 21.5% pure, 21.0% pure, 20.5% pure, 20.0% pure, 19.5% pure, 19.0% pure, 18.5% pure, 18.0% pure, 17.5% pure, 17.0% pure, 16.5% pure, 16.0% pure, 15.5% pure, 15.0% pure, 14.5% pure, 14.0% pure, 13.5% pure, 13.0% pure, 12.5% pure, 12.0% pure, 11.5% pure, 11.0% pure, 10.5% pure, 10.0% pure, 9.5% pure, 9.0% pure, 8.5% pure, 8.0% pure, 7.5% pure, 7.0% pure, 6.5% pure, 6.0% pure, 5.5% pure, 5.0% pure, 4.5% pure, 4.0% pure, 3.5% pure, 3.0% pure, 2.5% pure, 2.0% pure, 1.5% pure, 1.0% pure, 0.5% pure, 0.0% pure.

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## NEWS: WORLD TRADE

## IT tide washes away at tariff defences

Guy de Jonquière explains the forces driving towards freer trade in information technology

Hands of government seldom get personally involved in international trade negotiations. So President Bill Clinton's appeals to fellow Pacific Rim leaders last month to back a proposed agreement to free global trade in information technology (IT) products are powerful evidence of how badly the US wants a deal.

The effectiveness of Mr Clinton's diplomacy, at the Philippines summit of the 18-member Asia Pacific Economic Co-operation (Apec) forum, should soon become clear. The test will be whether World Trade Organisation ministers can agree next week in Singapore to abolish tariffs on most IT products by the year 2000.

That would be the biggest liberalisation package ever assembled for one industry. It would span products, including semiconductors, computers, telecommunications equipment and soft-

ware, which generate world trade valued at \$300bn-\$500bn a year.

It would also boost the WTO, where other recent "single-sector" negotiations, aimed at liberalising financial services, telecommunications and shipping, have yielded disappointing results. An important reason was that pressure from domestic producers led Washington to balk at agreements.

But many IT companies in the US and Europe are pressing for a WTO deal. After months of delaying tactics by Brussels, and ill-tempered exchanges with Washington, a transatlantic consensus is emerging on an outline accord. It is likely to be backed by Japan, which has already scrapped most IT tariffs.

However, a comprehensive package is not yet in the bag. Some companies on both sides of the Atlantic have been mounting re-

guard efforts to retain tariffs which protect their home markets. For instance, persistent lobbying led by the Dutch Philips group has kept consumer electronics out of the talks entirely.

Brussels has rejected Philips' pleas to exclude digital video discs, as well as Rank-Xerox's demands that EU tariffs stay on office copiers. But Xerox, Rank-Xerox's parent, is still lobbying in defence of US tariffs, as are some US component makers and Corning, a leading producer of optical fibres and television monitors.

Washington also chides the EU for reluctance to liberalise software, notably on CD-Roms. Brussels says it is ready to remove tariffs on computer programs, but that US demands to have recorded music and films included in a WTO agreement go too far.

If the US and EU insist on too many exceptions for their own industries, they

will not only limit the scope of an agreement. They risk undermining their attempts to persuade Asian IT-exporting countries, such as Korea and Malaysia, to open their markets further.

Solid Asian participation is now seen as crucial. "The US and EU account for only half world IT exports. To succeed, a deal must cover about 90 per cent of products," says a senior US official. Brussels believes broad Asian involvement is essential to persuade the EU's members to abolish its IT tariffs, the highest in the industrialised world.

But although Mr Clinton persuaded last month's Apec summit to endorse an IT deal, several Asian leaders there said the statement was so ambiguous that it committed them to nothing.

In fact, countries such as Malaysia and Singapore have already scrapped many

IT tariffs, and US officials claim some Asian exporters have offered in the WTO negotiations to liberalise further.

However, Asian governments are anxious not to be seen to cave in publicly to pressure from Washington, particularly when US companies, the world's biggest exporters of IT products, are expected to gain most from a WTO agreement.

On the other hand, Mr Clinton has invested much personal prestige in getting an agreement. That could make it more difficult for the US to walk away from a deal, as it did in the WTO financial services talks.

The chances are that last-minute compromises will be struck on issues such as product coverage and liberalisation timetables. But with the five-day WTO ministerial meeting due to open on Monday, little time is left to wheel and deal.

Even if an agreement is

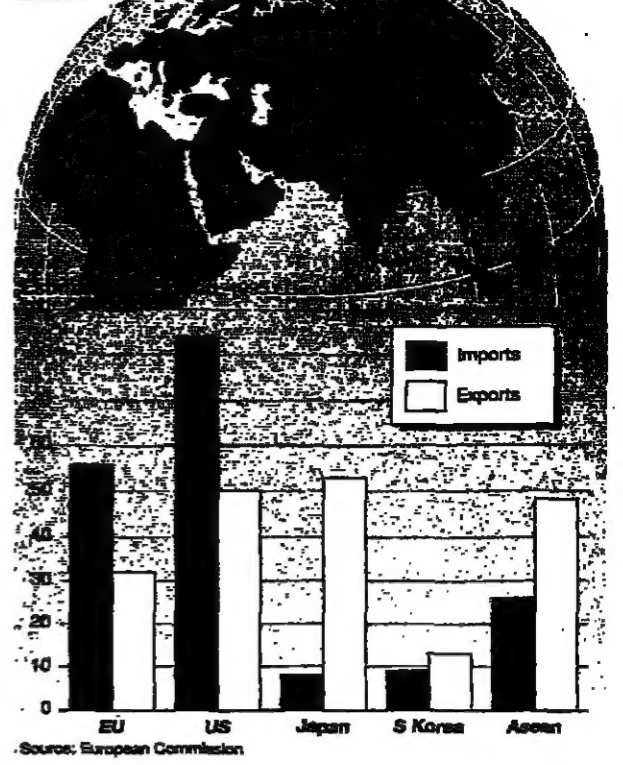
reached, it could give rise to conflicting interpretations in an industry where technology is constantly blurring product definitions.

The US and EU plan to review regularly the way in which individual products are covered by the agreement. Nonetheless, that might not prevent lengthy haggling in cases which affected important commercial interests or powerful industry lobbies.

But some electronics industry executives say pressures for global liberalisation in the sector are too powerful to be resisted for long.

Mr Bruno Lomborghini, head of Eurobit, a European IT industry association, thinks companies such as Philips are deluding themselves if they are counting on continued protection to survive. "The fight to keep high tariffs on consumer electronics will be lost. In the future, all IT products

Information technology trade



could easily become consumer products," he says.

See Information Technology Survey, Separate Section

## Hopes rise for UK-US air deal

By Ross Tremen in London

Efforts to reach an "open skies" agreement to liberalise civil aircraft traffic between the UK and the US reopen in London today, when US Department of Transportation officials meet their UK counterparts for three days' talks.

For the first time, airlines will be allowed to send observers to discussions. The last round of talks broke down earlier this year, partly over British demands that UK carriers be allowed to fly passengers within the US.

The outcome of the talks has become embroiled with the battle by British Airways and American Airlines to win official approval for their proposal to form a global alliance.

This would give BA/American more than 60 per cent of traffic between the US and UK, the world's busiest air route. Rival airlines have protested at the alliance and have been pressing for improved access to take-off and landing slots at London's Heathrow Airport and elsewhere, to ensure effective competition.

Hopes exist that the UK Department of Trade and Industry may help break the log-jam by soon announcing proposals from Mr John Bridgeman, UK director-general of fair trading, on which the BA/American alliance could proceed.

If that issue can be resolved, UK officials will

remain under pressure from Virgin Atlantic, the second-largest UK airline on transatlantic routes. Mr Richard Branson, Virgin's owner, wants open access to carry passengers in the US as the price for concessions.

The US Department of Transportation remains committed to obtaining open access to UK airspace and airports for US carriers. According to officials: "The UK is our largest aviation partner; we are not prepared to settle for anything less." Lobbying in the run-up to the talks has become highly charged. BA controls 38 per cent of take-off and landing slots at Heathrow Airport, already heavily congested. That would rise to 42 per cent if the alliance with American is approved.

Yesterday United Airlines said it wanted BA and American to surrender 30 per cent of their take-off and landing slots at Heathrow as the price of any alliance.

It also wanted BA and American to make room at Chicago and New York's John F Kennedy airport for extra flights by other airlines.

The proposal would involve transferring 30 daily slots at London Heathrow, six at Chicago and 12 at JFK to rivals. United would support an "open skies" pact on these terms and withdraw objections to a BA/American alliance, a United executive said.

US/UK air talks, by Richard Branson, Page 14

## Toymakers accused of ignoring factory code

By Peggy Hollinger in London

Toy manufacturers are putting the lives of workers in third world factories at risk to satisfy the west's Christmas buying bonanza, according to a leading lobby group.

With the UK alone likely to spend up to £200m on toys this month, Britain's World Development Movement is calling on consumers to put pressure on manufacturers to enforce safety and working conditions in factories.

The WDM has accused toy manufacturers of merely paying lip service to a code of conduct agreed earlier this year in which they adopted guidelines to improve conditions in third world factories.

"One year on from adopting the code, nothing has changed on the shopfloor," said Ms Aditi Sharma of the WDM.

The organisation is urging toy manufacturers to enforce the code through independent monitoring of factories,

including random spot checks on safety issues and working conditions. This would be carried out by bodies which included representatives of both employees and employers, the WDM said.

Evidence collected by the WDM since the code was adopted in January shows that many factories which supply the world's biggest toy manufacturers are cutting corners to provide competitive rates.

The WDM cites examples of worker exploitation from

China, Thailand and the Philippines. In one case a 17-year-old girl was forced to work day and night for three consecutive days with only two hours' break for lunch and dinner. Workers at another factory in Thailand are regularly fired after 119 days to avoid being paid benefits such as maternity leave and sick pay.

The lobby group claims that 24-hour shifts in the run up to Christmas are not unusual in many Asian factories.

Toys are big business at

Christmas, when about half the sector's sales are made. The WDM points out that Mattel, the world's largest toymaker, earns more in one hour of sales of the Barbie doll in the UK than it pays 27,000 Chinese workers. "We pay more for a Barbie doll in the UK than a toy worker in Indonesia earns in a week," the WDM said.

Toy manufacturers yesterday sharply rejected the WDM's suggestions that the code was not being enforced. "It is insulting," said Mr David Hawtin of the British

Toy and Hobby Association, which represents manufacturers' interests. "We refute any suggestion that the bulk of toys are made in extremely dangerous conditions."

Toy manufacturers were not about to allow independent monitoring along the lines suggested by the WDM, Mr Hawtin added. "We do not regard that as independent monitoring. We regard that as an invasion." This was a job which should be undertaken by the local government, he said.

## US tops poll on cultural exports

By Richard Tomkins in New York

France may protest about US cultural invasion, but few French consumers put the quality of their own entertainment above that of the US, according to a poll published yesterday.

In contrast, the British emerge as the world's product nation when it comes to home-grown entertainment, believing their own television programmes, pop songs and movies to be far better than those of the US or any other country.

The findings come from the third annual survey of consumer attitudes carried out by Borell Worldwide, the US advertising agency, and the Gallup Organisation, the US polling group.

The survey's main purpose is to find out how consumers in different countries rate the quality of manufactured goods produced by the world's largest exporting countries. Canvassing the views of 20,000 consumers in 19 countries, it claims to be the biggest poll of its kind.

As in the two previous years, Japan tops the poll as the country considered to produce the best quality goods, with 41.2 per cent of respondents considering its exports to be excellent or very good.

Germany is next with 35.1 per cent, and the US is close behind with 34.9 per cent. Then there is a big gap before Britain appears in fourth place with 21.2 per cent, closely followed by France with 20.6 per cent.

A different picture emerges in the entertainment sector, which features in the survey for the first time. Overall, consumers rate US entertainment the best in the world, with 41.5 per cent of respondents saying it is excellent or very good. Britain ranks a distant second, with 20.5 per cent.

In France, 27 per cent of consumers think French entertainment is excellent or very good, closely followed by the US with 23 per cent. But both scores are unusually low, suggesting either that the French are starved of popular culture or that they derive little pleasure from it.

Britons seem much more enthusiastic, with 64 per cent of consumers saying that domestically produced entertainment is excellent or very good. The US is far behind, but still scores an above-average 46 per cent.

Borell-Gallup Worldwide Quality Poll, Borell Worldwide, 40 West 23rd Street, New York, NY 10010-5201. Free.

## WORLD TRADE NEWS DIGEST

## US retreats on grain duty

The US yesterday withdrew its request for a World Trade Organisation panel to investigate European Union grain tariffs. The two sides are expected to try to settle the matter bilaterally. The US complaint relates to the EU's reference price system introduced in July 1995 for charging customs duties on wheat, rye, barley, corn, sorghum and rice. Washington wants duties charged on a shipment-by-shipment basis; Brussels says this is impractical.

The dispute settlement body was also told yesterday the report on Washington's complaint against the EU ban on hormone-treated beef, due shortly, would now be ready no later than next May. In another dispute, the US said it intended to change its rules on clean petrol to comply with a WTO ruling by the summer of next year.

Venezuela has agreed to this timetable; Brazil, the other complainant, says it is too long. Frances Williams, Geneva

## Spain-Morocco debt deal

The Moroccan government yesterday signed a debt swap agreement covering part of the \$1.36bn owed to Spain in official and state-guaranteed credits. The initial deal covers \$50m of loans which may be converted into Spanish private-sector investments in Morocco, and is expected to be extended later.

The state-guaranteed credits will be offered at a discount to Spanish bidders and used to finance approved projects. Morocco is seeking to reduce the burden of its \$21.5bn foreign debt and steer new investment into the north of the country. David White, Madrid

## Canada dairy victory

Canada has rolled back a US effort to eliminate Ottawa's supply management system for dairy and poultry products. The US has twice complained Canada's high tariff protection for dairy and poultry products violates the North American Free Trade Agreement and WTO rules. A NAFTA dispute panel has found Canada within its rights to keep tariffs on these products, under NAFTA and WTO rules. The US will "pursue greater access to Canadian markets with vigour". Robert Gibbons, Montreal

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## NEWS: UK

Municipality may extend street closures and checkpoints to counter threat from IRA

## City of London may widen 'ring of steel'

By Jimmy Burns in London

The Corporation of London, the municipal authority for the City, hopes to push through its delayed plans for an enlargement of the protective ring around the City as police continue to warn of the threat of further attacks in England by the Irish Republican Army.

The scheme extends the City's street closures and security checkpoints which were set up after the bomb attack on Bishopsgate in 1993.

The unarmed police who make random checks of

Mr David Trimble, leader of the Ulster Unionist party, said before a meeting in Washington yesterday with Mr Anthony Lake, national security adviser, that he hoped President Bill Clinton would "drop in". Mr Trimble's party is the largest pro-British party in Northern Ireland. He hopes Irish Americans will put pressure on Sinn

vehicles entering the City are sometimes replaced by armed officers.

Corporation members are expected to approve the extension tomorrow after a 10-month consultation period.

Mr Michael Cassidy, chairman of the corporation's pol-

icy and resources committee, said yesterday that the extension of the scheme was justified on security as well as environmental grounds.

"The risk that the City of London might be a target for the IRA remains high... and in the run-up to Christmas, there is always special con-

cern," Mr Cassidy said.

Although the City of London police are understood to have received no recent warning of an imminent IRA attack, the force has been on heightened alert since the paramilitary organisation ended its ceasefire in February with a bomb attack in

the Docklands district to the east of the City.

A spokesman for the City police said last night that the force backed the extension of the so-called "ring of steel" which has contributed to a 16 per cent reduction in crime levels over the past three years.

Approval of the scheme on Thursday will in the short term lead to some additional streets being closed off, and the introduction of temporary plastic bollards.

The City of London's police strategy, however, is based on a flexible and changing pattern of manned

checkpoints to avoid security being undermined by IRA intelligence.

Police have been relying on the increased use of closed circuit television and closer co-ordination with security officers employed by companies operating in the City.

Mr Cassidy said that the Corporation had received objections mainly from a "number of car users" whose offices are near the two additional security checkpoints which are planned for Ludgate Hill in the west of the City and Broadgate in the north.

## N Ireland business tops performance league

By John Murray Brown in Dublin

A survey of Northern Ireland companies by Coopers & Lybrand, the accountancy firm, emphasises the region's new competitiveness. "Northern Ireland remains at the top of the UK's performance league due to strong marketing, improved exports and tight costs control," said Mr Stephen Kingon, managing partner at Coopers.

Executives in Northern Ireland

are paid less than their counterparts elsewhere in the UK, the report says. It adds that women account for 38 per cent of finance managers compared with a national average of 12 per cent, one explanation being that more women are qualifying as accountants.

The results of a survey of 391 companies underscore the success of the region's corporate sector in containing personnel costs.

While pre-tax profits increased by 35.9 per cent remuneration for the highest paid directors rose by an average of 5.9 per cent. This is ahead of inflation, which is running at around 3.5 per cent, but less than salary increases in the UK as a whole, the report says.

The increases compare with an average of 7.8 per cent, in basic salary and annual cash bonus, awarded at FT-SE 100 companies in 1995.

In Northern Ireland, annual salary rises have declined from almost 8 per cent in 1990 to a low of 2.8 per cent in 1994. This edged up in 1995 and 1996, reflecting the increased profitability of business in the wake of the paramilitary ceasefires.

People in Northern Ireland are doing too little to stop paramilitary punishment beatings, Sir John Wheeler, the British minister responsible for security in North-

ern Ireland, said yesterday.

"Whether they come from the Provisional IRA or the so called Loyalists it doesn't matter," he said. "They are cruel attacks, they are damaging people, doing harm to the individual and are harming everybody in Northern Ireland."

The minister spoke after government figures showed a sharp rise in the number of beatings this year - 276 to November 25 against 217 for the whole of last year.

## UK NEWS DIGEST

## Oil output 'to break records'

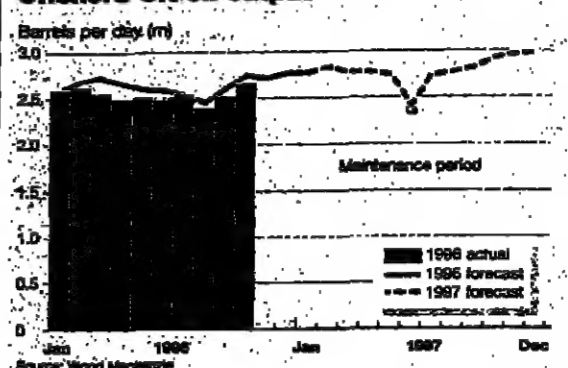
UK oil production is expected to rise by 210,000 barrels a day next year to a record 2.78m b/d, says a study by Wood Mackenzie, the Edinburgh-based oil consultant. Total North Sea output is expected to rise even faster, to a record 6.47m b/d as a result of an estimated 6 per cent increase in Norwegian production. But growing North Sea oil prices, is unlikely to meet the expected rise in world-wide demand next year. That, the study concludes, means there will be room for Iraq to resume exporting oil with just a "limited impact" on prices, which have been buoyant since August.

The Norwegian state, which has a direct stake in that country's oil fields, and Statoil, Norway's state oil company, are expected to remain the biggest North Sea producers next year. They will be followed by Shell, the Anglo-Dutch group, British Petroleum and Exxon of the US. The upbeat North Sea forecast follows lower than expected output this year, which Wood Mackenzie describes as "disappointing". UK production in the first half of the year averaged 2.53m b/d, well below the consultant's forecast of 2.66m b/d, as a result of delays to some new fields and unforeseen operational and maintenance problems at existing platforms.

The study says average production for the full year will be flat, at 2.57m b/d. But the negative financial impact of lower output has been offset by this year's sharp rise in oil prices, brought about in part by the North Sea production shortfalls.

Robert Corcoran

## Offshore UK oil output



Commodities, Page 26

## BROADCASTING DISPUTE

## BBC prepares case on digital TV

The BBC is preparing a powerful case to try to persuade the government that tighter regulations are needed to govern the introduction of digital television in the UK. The BBC, the public service broadcaster, wants fair trading obligations to be enforceable immediately on whoever operates the black box needed to convert the digital television signals. This should happen, the BBC believes, when specifications and contracts with broadcasters are being developed and not afterwards.

The BBC will also argue that set-top box operators such as British Sky Broadcasting, the satellite venture, should be obliged to licence their proprietary standards in the box to bona fide broadcasters subject to security safeguards administered by Ofcom, the telecommunications regulatory body.

Raymond Snoddy

## PARTNERS' ASSETS

## Liability law receives approval

Jersey's controversial limited liability partnership law has received the approval of the UK Privy Council and should come into force early in the New Year. The island is the largest of the Channel Islands between England and France and has its own legislature with law-making powers. The legislation offers the members of big partnerships protection for the personal assets of partners in the event of a claim being against the firm. Several organisations, including accountants Price Waterhouse and Ernst & Young, have indicated that they will register in Jersey as LLPs.

Philip Jeune

## HOME SHOPPING

## Eddie Bauer proposes venture

The growing fashion for catalogue shopping in the UK has prompted Eddie Bauer, leading US casual wear retailer and mail order group, to launch a joint venture with Grattan, the UK's fourth biggest home shopping company. Eddie Bauer, which claims sales of about \$1.5bn in the US, plans to launch four upmarket casualwear mail order catalogues by 1999 in conjunction with Grattan. It is also planning to open three retail outlets in London and Manchester next year.

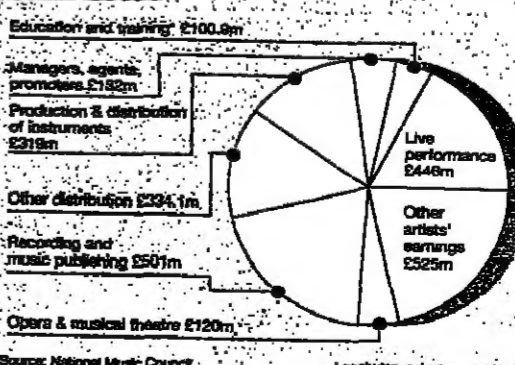
The Seattle-based company is best known for its distinctive outerwear and accessories and has virtually become a lifestyle brand in the US. Eddie Bauer is owned by Spiegel, one of the largest US mail order houses, and has 440 outlets in the US. It also has stores in Japan, Germany and Canada.

Peggy Hollinger

## MUSIC

## Net output \$4.2bn last year

## Bank notes



The UK music industry generated "value-added", or net output, of \$4.2bn (\$4.2bn) last year, according to a survey compiled by the National Music Council. This made it a bigger contributor to the economy than chemicals, water supply and electronic components. The money came from a variety of sources including record sales, receipts from live performances, musical instrument production and music publishing royalties. About 160,000 people were involved with the industry and generated the equivalent of 115,200 full-time jobs.

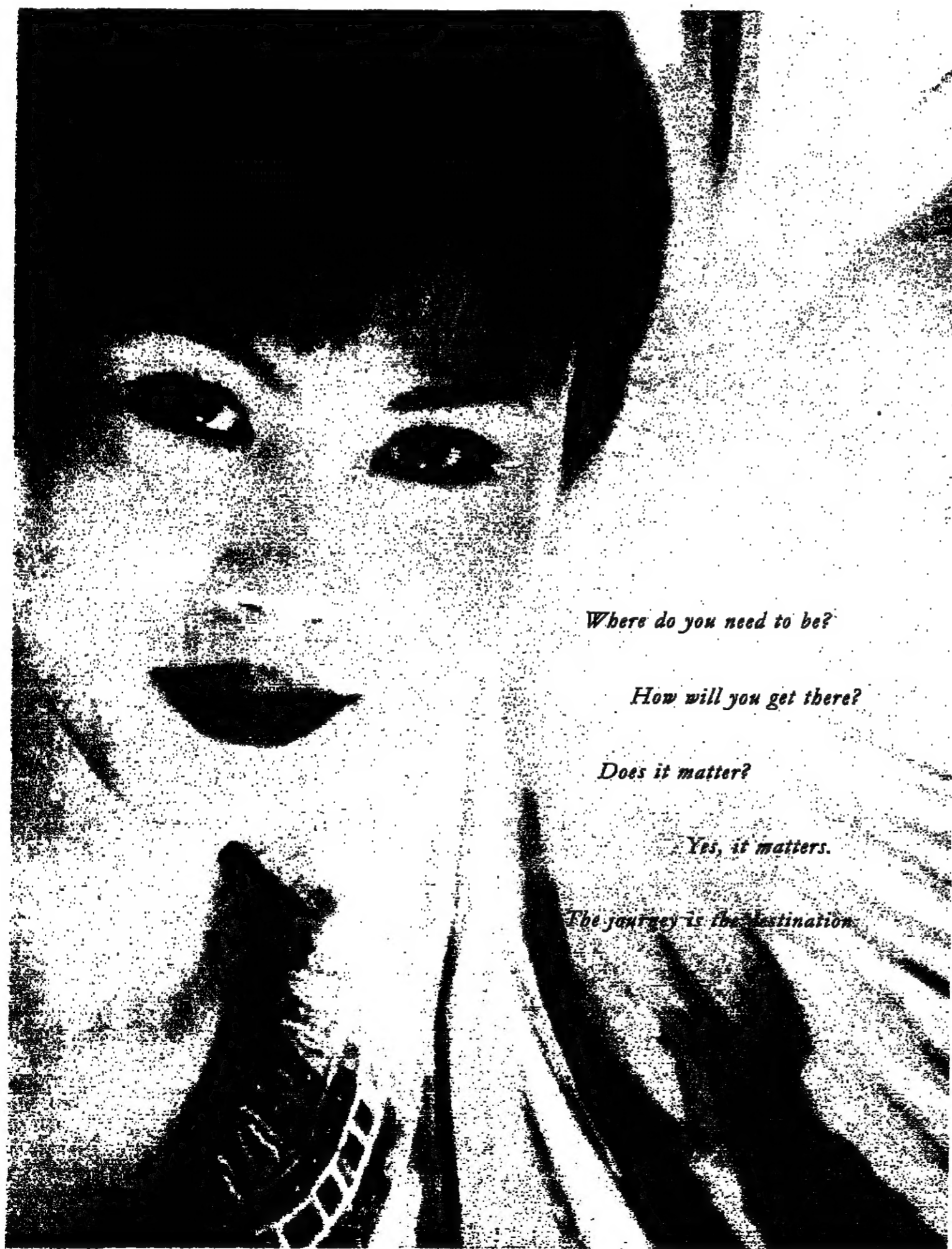
Alicia Rawsthorn

## GIBRALTAR

## Ex-minister to be governor

Sir Richard Luce, former minister in the UK Foreign Office, is to be governor of the UK colony of Gibraltar at the southern tip of Spain. The fact that Sir Richard takes over from a succession of military governors could suggest a greater emphasis on political issues such as relations with the European Union and Spain. The UK and Spain have been unable to reconcile their conflicting sovereignty claims over Gibraltar.

Jimmy Burns



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سنگاپور ایرلاینز

Minister confirms isolation and sets stage for conflict ■ Pro-Europeans score victory in cabinet

## EU treaty draft 'far too centrist'

By Robert Peston, Political Editor

The British government's virtual isolation in negotiations for a new European Union treaty was confirmed yesterday by Mr David Davis, the foreign office minister leading the UK's team.

Giving evidence to the House of Commons committee on European legislation, Mr Davis said the draft of the new treaty, which he expected to be unveiled in Brussels on Friday, would be "far too integrationist and too centrist" for the UK.

The text, drawn up by the Irish government as holder of the EU presidency, will attempt to distil a consensus from the past year of negotiations at the intergovernmental conference.

UK opposition to almost every proposal would be very clear in the text, Mr Davis said. The government did not "remotely mind" if the draft named the UK as the main objector.

The stage has therefore been set for conflict at the EU government heads summit in Dublin next week, when the draft treaty will be top of the agenda.

Mr Davis gave a catalogue of proposed reforms from which the UK dissents. He also made no attempt to disguise lack of support for the UK's agenda.

He said only the UK and Denmark opposed proposals to give EU institutions, including the European Commission and the European Court of Justice, a far bigger role in setting justice and home affairs policy. The UK was implacably opposed to such a change, he added.

Mr Davis highlighted the "big gap" between the UK and Franco-German positions on so-called "flexibility", or how to allow groups

of countries to integrate faster than the EU as a whole.

In this area, as in every other under negotiation, Mr Davis said Britain aimed to retain a veto over instances of countries pursuing integrationist ambitions. "We will not accept any undermining or dilution of the veto in any circumstances", Mr Davis repeated the point several times.

He made some attempt to appear conciliatory on reforms of foreign policy decision-making. The UK might back the German proposal for a system of "constructive abstention", by which a country abstaining from a decision would not prevent others pursuing a joint foreign policy objective.

However, the UK was quite happy to block all reform in this area, if other countries insisted on changes with implications for the use of the veto.

He detected some support from France and Germany for UK proposals to limit the retrospective effect of European Court of Justice judgments and to put a ceiling on penalties.

But he confirmed that the British government would not hesitate to veto the entire package of treaty reforms, scheduled for final agreement in the middle of next year, unless the UK obtained exemption from the working hours directive and reform of the common fisheries policy.

Mr Noel Dorr, the senior Irish diplomat chairing the IGC negotiations, made clear yesterday that the Dublin government was intent on avoiding a clash at next week's EU summit, Lionel Barber writes in Brussels. "We have not asked anyone to sign up to the text as a treaty," Mr Dorr said. "It serves as a working basis for further negotiation."

## Forex dealers relaxed about changes

Currency traders in the City of London, the world's biggest foreign exchange market, seem relaxed about the impact of European economic and monetary union.

The prospect of hundreds of traders being thrown jobless on to the street as currencies disappear overnight does not scare them. "It's not going to make much difference to us," said Mr David Clark at Bank Gesellschaft Berlin, in London.

This confidence stems from the fact that the European currencies likely to be swallowed up in the euro - the proposed single currency - make up only about 10 per cent of total turnover in London's \$44bn-a-day foreign exchange business.

The loss of the European currencies would simply push us back to 1993 levels," said Mr Graham Cocks at First National Bank Boston. He believes that the growth of the foreign exchange markets - which has been rapid over the last few years - would soon

replace the lost business.

This could include the new euro, trade in which may expand quickly if the move to a single currency triggers faster growth in the economies taking part.

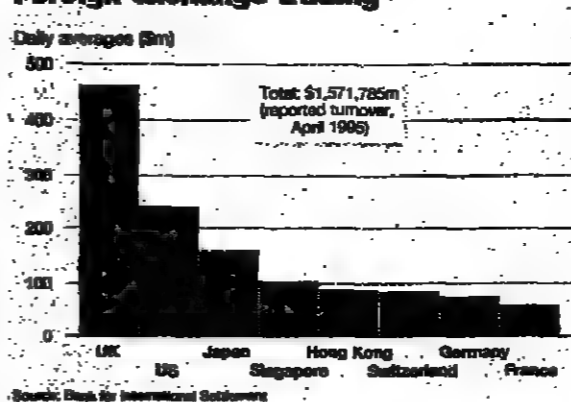
But while turnover has grown, banks' profits have not. Currency markets are extremely quiet by historical standards. Banks report that several institutions are laying off foreign exchange traders mainly because the volatility on which the business thrives is simply not there, especially between European currencies such as the D-Mark, the French franc and the Italian lira.

"Already we have in effect monetary union, with low volumes. So already banks are not generating large amounts of income from trading these markets," said Mr Avinash Persaud, head of currency research at J.P. Morgan in London.

Most banks in London have begun to look for other, more profitable trading opportunities.

Many have begun trading

### Foreign exchange trading



the more volatile currencies of eastern Europe, Russia, Asia, South America and Africa. It is the breathtaking growth of these markets that dealers believe would quickly replace the business lost following Emu.

Mr Michael Green, head of foreign exchange sales at Citibank in London, said: "We are very much retooling and training to take a more active role in emerging market currencies than in European currencies."

One possibility raised by the onset of Emu is that London might lose out as a financial centre if the UK were to stay outside the single currency in the first wave - which, at present, seems most likely.

In the case, other European financial centres such as Frankfurt and Paris might gain by being part of Emu. They would be close to the institutions, such as the proposed European central bank in Frankfurt, which

would be central to the operations of the euro markets. But many experts in London believe that London will retain its position as the pre-eminent European financial centre.

"There is nothing to suggest that just because the ECB is in Frankfurt that all of Europe's foreign exchange business will gravitate to Frankfurt," said Mr Green.

They believe that London has the "critical mass" of expertise and infrastructure which means it is best placed to exploit growth areas such as emerging markets. They point to the preponderance of French and German banks in London as a measure of the City's attractiveness.

"The opportunities in emerging markets will be best exploited in London, where much of the business is already being done - much more so than in Madrid, Milan, Paris and Frankfurt," said Mr Clark.

Graham Bowley

## Premier deals blow to Eurosceptics

By Robert Peston in London

Mr John Major, the UK prime minister, yesterday attempted to eliminate any suggestion that the governing Conservative party will campaign in the coming general election for sterling to remain outside a single currency for the lifetime of the next parliament.

This came as a bitter blow to his Eurosceptic backbench colleagues, although Mr Major's close colleagues insisted that his rhetoric would increasingly signal that joining in the first wave was highly unlikely.

It was clear last night, however, that the two most pro-European cabinet members, Mr Kenneth Clarke, the chief finance minister, and Mr Michael Heseltine, the deputy prime minister, had

secured an important victory. Mr Heseltine made a significant intervention early yesterday, as signs emerged that the government's "wait and see" approach was starting to unravel.

The previous day, an unsecured article in the Daily Telegraph newspaper prompted speculation - even among senior cabinet ministers - that the prime minister was poised to rule out

approval will put pressure on Mr William Hague, chief minister for Wales, to close a funding gap. They accuse Mr Hague of months of delay in making a decision and of putting the scheme in jeopardy.

Funding may also be available from the European Union.

sterling joining a single currency. Ministers believed that Mr Major had been giving himself room for manoeuvre during the previous few months.

But such a policy change would have prompted Mr Clarke to quit "on the spot", according to one of his colleagues, so Mr Heseltine moved swiftly to shore up his close ally.

At the regular meeting of EDCP, the cabinet commit-

tee which sets the presentation of policy, he informed colleagues that there would be no departure from the prime minister's statement of last April that the Tories would be "keeping our options open at the next general election".

Mr Heseltine then said in a radio interview: "The policy of the government is agreed by the cabinet... It was spelled out in the early part of this year. It was reiterated

by the prime minister and the chancellor at Bournemouth in black and white language, and it is not going to change."

In the wake of these unambiguous remarks, MPs waited with great anticipation to what Mr Major would say in the House of Commons. Mr Major bluntly told Mr Tony Blair, leader of the opposition Labour party, that he agreed with the deputy prime minister.

The prime minister's more Eurosceptic friends were last night trying to put a brave face on what represents a significant reversal for them.

"Whatever we feel about the merits of a single currency, it clearly makes sense for us to influence negotiations on its merits," said one.

Editorial Comment, Page 15

## Utility shares sold for \$434m

By Simon Holberton in London

The government yesterday sold virtually its entire portfolio of shares resulting from privatisations of utility industries for nearly \$260m (\$434.2m) in cash.

The sale of shares and debt in the 10 utility companies puts receipts from privatisations this year at more than \$4bn, well on the way to the Treasury's target for raising \$4.5bn for 1996 from asset sales.

"This is cash the Treasury needs for tax cuts," one City of London analyst observed.

The sales yesterday are in line with the government's policy of divesting itself of residual shareholdings in privatised companies.

The government is now left with holdings in British Telecommunications and Mersey Docks and Harbour Company valued at about £100m in total. In addition it has about £160m of Scottish Power debt to redeem. Privatisation of the Post Office remains contentious but may surface as a manifesto pledge from the ruling Conservative party.

The biggest sale yesterday was of 51m shares in British Energy, the nuclear utility, 11.2 per cent of the company. It sold the stake for 145p a share - well up on the 105p a share flotation price.

The government also sold its holdings in National Grid, Northern Ireland Electricity, Scottish Hydro-Electric, Scottish Power, National Power, and PowerGen. These were bought by Dresdner Kleinwort Benson. Merrill Lynch bought stakes in South West Water and Wessex Water, while ABN AMRO Hoare Govett bought 3.57m shares in Severn Trent, the water company.

The golden shares - retained in the generating companies which allows the government to prevent an unwanted change of ownership - are unaffected.

Power to the People, Page 15

## THE DAVID THOMAS PRIZE

David Thomas was a Financial Times journalist killed on assignment in Kuwait in April 1991. Before joining the FT he had worked for, among others, the Trades Union Congress.

His life was characterised by original and radical thinking coupled with a search for new subjects and orthodoxies to challenge, particularly in the fields of industrial policy, third world development and the environment.

In his memory a prize has been established to provide an annual study/travel grant to enable the recipient to take a career break.


In this, the sixth year of the prize, the theme is:  
"Home Truths from Abroad": A policy idea from outside  
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The 1997 prize will be worth not less than £3,000.

Applicants, aged over 21, of any nationality, should submit a typed entry of up to 800 words in English, together with a brief c.v. and a proposal outlining how the award would be used to explore the theme further. Please keep David Thomas's interests in mind when writing both the entry and the proposal.

The award winner will be required to write a 1500 to 2000 word essay at the end of the study period. The essay will be considered for publication in the FT.

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## BUSINESS AND THE ENVIRONMENT

Germany is deregulating environmental controls as the economy takes priority, writes Leyla Boulton

## A trailblazer fizzles out

The German government, once the world's "green" trailblazer, is now accused by domestic critics of sacrificing the environment on the altar of business.

At a time when worries about competitiveness and unemployment are paramount in Europe's largest economy, Germany is seeking to deregulate environmental controls and cut business costs.

"Rather than deregulation, I would prefer to call it regulation, which makes for a difference in perception," says Hendrik Vögen, deputy director-general of the federal environment ministry in Bonn. "Various studies have led to the conviction that we have maybe overdone things in terms of procedures, permits and authorisations."

Such nuances are lost on the government's critics. "This is what we call the Britishisation of Germany," says Monika Griefahn, environment minister of the state of Lower Saxony whose SPD party is in opposition to the federal government in Bonn.

The former Greenpeace campaigner compares what is happening in Germany to British pro-business deregulation efforts, social spending cuts and what she sees as an accompanying decline in quality of life. She, like Michaela Hustedt, who speaks on the environment for the Green party, argues that Germany's economic wellbeing will be secured by developing new green technology markets. "There is a growing perception that environmental protection has to wait for better times in the economy but we think better times will not come fast if they come at all," says Hustedt. She cites party's recent rise to Germany's third biggest party - with a real chance of entering a coalition government with the SPD after the next election - as a sign that green awareness in the country is flourishing.

Another critic accuses Angela Merkel, the former east German physicist turned environment

minister, of "contriving to make environmental issues disappear from the political agenda".

According to one story circulating in Bonn, Helmut Kohl, the chancellor, appointed Merkel as minister after industry leaders at the last election demanded the head of her energetic predecessor, Klaus Töpfer, now construction minister. Officials deny this, but say that Merkel's low-key but still effective style is more suited to the times.

Opinion polls suggest that environmental protection is also perceived by the public as less of a priority than the economy. Yet the polls also show that a majority of Germans believe the world is heading towards an ecological catastrophe unless it adopts more environmentally sustainable development.

But Hubert Hertel, in charge of the German chemical operations of Akzo Nobel, the Dutch chemicals and textiles group, speaks for large sections

**Opinion polls suggest that environmental protection is perceived as less of a priority**

of German business when he says: "Environment is no longer the only argument. You have to find a balance between environment and jobs."

A first reform step by parliament this summer aimed to simplify the environmental red tape for companies seeking to expand industrial installations. Peter Faziolek, a Christian Democrat member of parliament's said the move was crucial to demonstrate that environmental protection was not incompatible with competitiveness.

A voluntary agreement by the electricity industry to reduce carbon emissions associated with global warming, and another vol-

untary initiative by the car industry to recycle old vehicles, are cited as other signs of environmental deregulation. Such agreements, the norm in the Netherlands, are seen as a cheaper alternative to over-prescriptive regulation or taxing pollution.

But already the critics claim that the electricity producers will not live up to their pledge of a 25 per cent cut in carbon emissions by 2005.

The environment ministry argues that it is too early to draw such conclusions. Vögen believes that the agreement, which will be monitored independently by the RWI Institute, "now has teeth" and will achieve its objectives. Executives at the sprawling Volkswagen headquarters outside Hanover, the capital of Lower Saxony, view the changes with satisfaction but want the government to go further. Rudolf Stobbe, head of environmental protection and works safety at Europe's largest carmaker, says another area which should be deregulated is pollution control.

He would like to see an overall limit for an entire plant for each type of emission rather than limits for individual sections of a plant ranging from the paint shop to the assembly line. Stobbe argues that this would help German companies compete more effectively with carmakers in neighbouring France, where companies have more flexibility in complying with overall pollution limits.

Other items on Volkswagen's wish list, such as a lowering of tax on diesel engines on the grounds that the health risks of particulate pollution have been "exaggerated", may prove less palatable politically than simplifying Germany's tangle of red tape.

But in an argument that could easily have come from the mouths of US executives, Stobbe says companies which do more for the environment than required by law deserve more



freedom in how they comply with regulations.

However, changes in Germany so far appear mild in comparison to a backlash in the US against similar "common-sense" control regulations prescribing in detail how companies should comply with environmental standards.

In the US, the Republican-controlled Congress elected two years ago has sought to gut whole areas of environmental protection. That backlash against regulation was halted by a surge of public concern about the environment, but the Clinton administration has pressed ahead with efforts to find more cost-effective forms of protection.

Most of the German government's critics agree that some change is needed. But they argue that the government is pursuing the wrong kind of reform while abandoning Germany's role as an international trailblazer.

Krist von Weissacker, president of the Wuppertal Institute for Climate, Environment and Energy, despairs in particular at the government's failure to embrace ecological tax reform.

Such reform would cut payroll taxes with corresponding increases in taxation on energy consumption and environmental damage. This would help reduce both pollution and Germany's high labour costs simultaneously, argues von Weissacker. The concept enjoys the support of a wide range of politicians, economists, and some sections of business, not to mention the public. Industry, however, is lobbying

against the idea, says von Weissacker, partly because it does not trust politicians to reduce payroll taxes, the gold pro quo for levying new environmental taxes. Another reason is that "industry wants to fight for an overall reduction of taxes" rather than shifting the burden around.

He says the policy of not going ahead with ecological taxation without the rest of the European Union is a sign of Germany's abdication of its leadership role on the environment.

Germany's obstruction of an EU energy efficiency directive at a meeting of energy ministers last year was another sign of this retreat, he says. Embarrassed officials say the decision did show some "inconsistency" but, says one, "you cannot get everything you want in government".

Gert Billen, director of Germany's Nature Conservation League, says the government should be focusing on making existing legislation more effective, for instance in the area of recycling. While Germany has the toughest laws in the world for the recycling of household waste, public opinion has been shocked to see some of it exported to developing countries. "If you watch the news and see your plastic bottles ending up in Indonesia, you ask yourself what on earth you are doing."

*The Business and Environment page will next appear on Thursday January 2 1997*

## High price of a green machine

Environment-technology makers are encountering several obstacles in export markets

Nice to have but ugly to pay for, is how Peter Fritz, managing director of Prensag Noel, a German producer of environmental technology, describes his products.

The Würzburg-based company is one of the main participants in a market whose size is a political issue in Germany. This is because assumed rich pickings in the field are cited as an argument for maintaining strict environmental regulations at home, to spur innovation by German companies.

There is wide disagreement on the size of the market. Wolfgang Kihmel, who follows environmental technology at the VDMA, the German plant and machinery builders' association, says the green technology market is "over-valued and over-judged". He blames "consultants and lots of other more or less serious people [who] invent figures to talk about a market which is worth several billions of marks".

The association estimates the value of all foreign orders received by German companies at about DM700m (£371m) for 1994. In sharp contrast, the RWI Institute put the industry's foreign sales in 1993 at DM11bm.

Whatever the true figure, at least two of the difficulties cited by German producers in winning export orders appear to be genuine. One is price. "The story is the same everywhere. Companies want German technology for Italian or British prices," says Kihmel.

Fritz, who concedes that "we may have spent too much money developing technologies" believes that German companies will have to be "more creative" in cracking open markets. This will mean helping clients devise longer-term payback mechanisms for companies to secure their investments.

The second big obstacle facing environmental technology companies worldwide is slow demand from potential clients who may yet have to enforce strict new standards on air

pollution, waste disposal or water treatment.

Even when there is demand for products in, for example, some of the richer, fast-growing economies of Asia, financing remains a problem. "If you want to go to Asia you have to bring the money with you. You have to do everything. It's not just a problem of standards," says Fritz.

Although official financing is available, for instance from the KfW development bank, Fritz says the challenge is finding ways of getting paid by the ultimate beneficiaries of environmental goods and services.

This means, for example, charging Chinese households higher prices for clean drinking water supplies or more environmentally friendly rubbish disposal. Critics of the industry argue that it needs to do more to adjust to the needs of customers in the developing world. Monika Griefahn, a former Greenpeace campaigner who is now environment minister for the state of Lower Saxony, says that "industry needs to develop simple and cheap technology which it can sell abroad". Birgit Homburger, a member of the FDP party, the coalition partner to Chancellor Helmut Kohl's Christian Democrats, says German companies need to get out of a habit of offering only state-of-the-art wares.

She found during a visit to Malaysia, for example, that would-be German exporters were afraid of being seen to offer anything less than the best. "They told us 'we don't have any prospectuses for older technology', I said 'do a new one'. They see the point but they have problems with their headquarters back home."

It is a message which has already trickled back to many hardwired. "It is not necessary for us to spend money on more sophisticated systems," says Fritz, "but to develop ones which we can sell in other countries."

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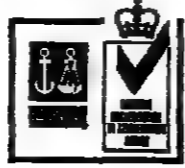
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COMPANY PLC  
(IN PROVISIONAL LIQUIDATION)

AND IN THE MATTER OF THE  
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NOTICE IS HEREBY GIVEN that by an Order dated 11 November 1996 made in the above matter, the Court has directed that meetings ("Scheme Meetings") of the Company's Scheme Creditors as defined in the Scheme be held on 14 February 1997 at 11.00am at the offices of the Company at 25-26 Fenchurch Street, London EC3M 4AD, England during usual business hours on any day other than a Saturday, Sunday or Bank Holiday prior to the day appointed for the Meetings.

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By the same Order, the Court has appointed Paul Anthony Stratton, Esq. of No. 1 London Bridge, London SE1 9QL, or failing him, Richard Claude Boys-Stones of No. 1 London Bridge, London SE1 9QL, to act as Chairman of the Scheme Meetings. The Court has also directed the Chairman to report to 2 the results of the Scheme Meetings. The Scheme of Arrangement will be subject to the subsequent approval of the Court.

No 00386 of 1996  
IN THE HIGH COURT OF JUSTICE  
CHANCERY DIVISION

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## ARTS

Television/Christopher Dunkley

## There's no accounting for taste

Tomorrow night's drama documentary *Hillsborough* raises the old questions about this type of programme all over again. Is this supposed to be the truth? A bit of the truth? Or simply a compassionate attempt by Jimmy McGovern, creator of *Cracker*, to even things up a bit and make those of his fellow Liverpudlians who lost relatives at the 1989 soccer stadium disaster feel better? Presumably the latter. It is, of course, a terrible story, and there are moments of great poignancy as when a mother, unable to comprehend the loss of her daughter, cries "She only went to a football match, for god's sake, she hasn't even tied her room".

To this day what seems to rankle most in Liverpool is the claim by the Sun that those involved were a crowd of drunken, thieving louts. That seems at best questionable. But so does McGovern's picture of an idyllic working class community consisting entirely of Oxo families, none of whose members would allow a drop of alcohol to

pass their lips. It does seem disgraceful that no one in the police force has been so much as reprimanded for what happened that day. Yet there is something distasteful about this programme's message that what matters most is having somebody to blame and large amounts of money in compensation. It is a sad thought that in the victim culture of the 1990s this may really be what people feel most strongly.

Is my memory going or did the FT's own Janice Robinson explain in her *Wine Course* on BBC2 a year ago why corks are technically unnecessary for wine bottles but likely to continue for emotional reasons? Did she explain what is meant by corked wine? And go into the question of how you make rose wine and which ones are particularly

good? Did she visit various growers and explain the differences between small traditional producers and the huge modern undertakings? And have a look at labelling? If the memory is still fairly reliable, can anyone explain why, 12 months on, the same channel is covering the same points with another wine writer from another daily paper in *Clack Clack Clack*? Did BBC2 commission the entire *Wine Writers Guild* to produce one series each until the end of the millennium? Or what?

Channel 4 has an admirable record in supporting worthwhile arts ventures, from the backing of young directors to the funding of the magnificent silent film restorations by Kevin Brownlow and David Gill. These began with the astounding *Napoleon* in 1980 and continued at this year's Lon-

don Film Festival with the 1925 Lon Chaney version of *Phantom Of The Opera*. Watching it in the Royal Festival Hall, driven along from cinema to cinema by a full orchestra under Carl Davis, you realised what an inspiration this movie was for Andrew Lloyd Webber when he wrote his stage version. The newly restored film will be shown on Channel 4 on December 28.

However, Channel 4's arts sponsorship can cut both ways. Watching the coverage of *The Turner Prize* you wondered why all three of those commending on the competing works were so benign, why none of them would murmur so much as a vague reservation let alone a roar of laughter to match those of the viewers at home and the declaration "This is preposterous". But the reason, presumably, is that Channel 4 cannot bring itself to

fund the thing and then have even one in three of the people on its own programme expressing what most of the audience feels.

Only the BBC could set the whole of the first 55-minute episode of a four-part series called *Loes of Jesus* in India, a country notable for several major religions but not Christianity. This odd choice occurred, presumably, because the programmes are being presented by Mark Tully who is famous for having spoken out against the British revolution at the BBC, and even more famous for having been the BBC's man in India for 30 years. It puts you in mind of the man who was found by a policeman peering at the pavement under a lamp post, saying that he had lost his top. The policeman joined the search and after a while said

"You're certain you dropped it here?" to which the man replied "Sure - I dropped it up the road but it's pitch dark up there".

The first of BBC2's promised trio of "Monday night films" (i.e. 90-minute television dramas) in *A Wicked Woman* strand was *Broken Rusties*, a sort of multi-coloured live action cartoon about male strippers. Given what it must have cost it seems a pity that everything about it - casting, locations, acting, direction, costumes, dance numbers, lighting - was so much better than the script. Robert Lindsay stole the acting honours as an ageing but priapic stripper, and his routine in the (icing-sugar-pink ladies' loo was the high point of the show. Not bad in a cast which included Julie Walters, Alan Armstrong, and Barbara Keogh, not to mention

Julian Clary on a trapeze. I said not to mention...

Many television producers seem to have a profound belief that there must be a way of making discussion programmes without a Paxman style moderator moving matters along and ensuring that only one participant speaks at a time. Not long ago we had a series in which two people with diametrically opposed views were supposedly stuck in a lift. Now we have *A Room With Two Views* on BBC2 in which two people with diametrically opposed views are stuck in a studio. What they do much of the time, of course, is try to shout each other down. In the opening programme Chris Tame expressed reasonable and sensible ideas about pornography while John Jordan, an odd looking man with grubby glasses, a multi-buttoned waistcoat, and a fixation on what he chose to call "wanking", revealed all sorts of anxieties and insecurities about sex. It might have been a fascinating discussion if only there had been a Paxman figure to keep order and move it along.

## Theatre

## Grass roots in Ireland

Laden with awards, Martin McDonagh's first play *The Beauty Queen of Leenane* - now earlier this year - now arrives in the West End. "Most Promising Newcomer", "Best Fringe Theatre Play", "Most Promising Playwright", McDonagh is a remarkably natural writer. No flashy cleverness here, no agitprop, no postmodern irony. Instead, charm, horror, fun, and pathos.

*The Beauty Queen*, though set in the present day, is not a modern play. Indeed, part of its point is the terrible unchanging stasis of provincial Irish life. Maureen is a lonely 40-year-old spinster who waits, hand and foot, on her malicious and hateful mother, Mag. Her longing for a man who will release her from this existence is at once reminiscent of Pigeon in Synge's classic *The Playboy of the Western World*. Life in Leenane is dull, and the main neighbour we see is the bored, irritated Ray Dooley. But Ray's elder brother, Pato, brings Maureen home one night, and, at her behest, stays the night. Most reminiscent of *The Playboy* is the easy Irish lyricism of his talk to her: "And when I'm over there in London and working in rain and it's more or less cattle I am, and the young fellows cursing over cards and drunk and sick..." Lovely stuff.

In its second half, *The Beauty Queen* becomes considerably more "dramatic".

But only in a conventional sense; and here is its weakness. The horror that was in the air now turns into action; and the drama, alas, starts to turn into Victorian melodrama. (On West End opening night, parts of the audience behaved as if following *Maria Marten*, with loud and disapproving gasps at one wicked deed and louder and more shocked gasps at the next.) The way McDonagh ends several scenes as if on a headline keeps making *The Beauty Queen* too trite.

Garry Hynes, directing, does mainly a very good job; but she has also let certain turning-points become too hammy. The long, appalled, open-mouthed, silent stare between mother and daughter after Mag has let slip her guilty knowledge - and, while staring wordless and aghast back at her daughter, she lets a biscuit slowly drop from her hand - is several degrees too stagey.

It is hard, admittedly, to review *The Beauty Queen* itself, and not the awards it has received. Coming to it now for the first time, I note that two of its four actors have changed, and that not all of its effects are as well suited to the former Duke of York's Theatre as they must have been to the Royal Court's small Theatre Upstairs. In that intimate space, no doubt, the play's

contrast between events broadcast on an Australian TV soap opera and this drab house in remote Galway would have more impact. Likewise the realistic detail of Francis O'Connor's set. At the Duke of York's Theatre, the characters may complain of the smell of wine, but the audience smells only an orange peeled in one scene by Pato.

Enough of these reservations. *The Beauty Queen* is a welcome arrival in the West End, and much about it is excellent. All four actors do well, and I particularly admire the two newcomers to the cast. As Pato, Lloyd Hutchinson has never been better. The mixture of awkwardness and artlessness is very fine, and the helpless ease with which he utters remarks like "Sure, I dunno". I love the no-nonsense stride with which, as Maureen, Jane Brennan paces this kitchen; the touching way she handles the love scene with Pato, part brusque, part wistful, but eventually retaining the initiative; and the understated way she presents the play's most dramatic speeches and actions. The quiet with which she utters the longest speech to Mag could not be bettered.

Alastair Macanlay

At the Royal Court Theatre Downstairs, St Martins Lane, WC2.



Easy Irish lyricism: Lloyd Hutchinson and Jane Brennan

## Opera in Copenhagen

## Wagner with a light touch

As almost everyone knows, Copenhagen has been this year's cultural capital of Europe; and the Royal Danish Opera's final contribution to it is a new production of *Die Meistersinger von Nürnberg*, cast almost entirely - and proudly - from within its own company. It is an inspiring reminder that Wagner's most comfortable, humane work really is a "company opera", never thriving so well when star principals are allowed to dominate it.

In fact the Copenhagen principals are excellent. They happen not to have world-class voices (thus far, most of them are young yet), but they are all excellent. The director Francesco Zambello has taken thorough advantage of that; with the choreographer Lisa la Cour she has contrived to animate the chorus individually too. This *Nürnberg* is full of people, not faceless choristers.

As Zambello's way, they get no help from any picturesque settings. Alison Chitty's functional designs provide only skeleton scaffolding in blond wood, with flights of steps joining one floor to another. Yet her late-19th/early-20th century costumes - some raided from the Royal Theatre's own archival wardrobe - fix a helpfully specific status for everybody in this little bourgeois town, and everybody relishes playing up to them. At the culminating civic festival and song-contest, however, the various parading guilds melt happily together under flags of the same variegated green.

The central "private" drama, which leads to a reconciliation between knightly juvenile and bourgeois community, avant-garde artist and tradition-bound professionals (only Wagner could have fantasized such a self-regarding parallel) is sketched lightly. The cross-class lovers, knightly Walther and bourgeois Eva, are eagerly

attractively sung by Stig Fogh Andersen and Tina Kiberg, and played for light romantic comedy.

Christian Christensen is a tall, dignified-but-concerned Father Pogner. Bent Norup makes Hans Sachs, the ageing, naturally noble cobbler and mastersinger who relinquishes Eva to Walther - a model of dry, intelligent decency. He controls a threatening volubility in the voices very well, at some short-breathed cost to his expansive longer phrases.

Amidst this winningly plain, satisfying *Meistersinger*, two performers make

This is a thoroughly friendly 'Meistersinger'

special marks. As David, Sachs's lovelorn apprentice - in the Royal Opera's Danish German, often called "Dau-veed!" - Gert Hennings-Jensen does an irrepressibly elfin, all-singing-all-dancing turn, teeth'n'miles with impeccable pitch. Scandinavian audiences, like Soviet ones of yore, seem to relish balletic "jeeters" more warmly than the rest of us.

As the frustrated pedant Beckmesser, Guido Faevatalu sings earnestly and rather beautifully, with no exaggerated tics, leaving the garbled words of his stolen competition-song to stand comic duty on their own. The verbal salad never works very well in English, but the audience here guffawed heartily at the Danish subtleties.

Heinz Fricke conducts with seasoned understanding. This is a thoroughly friendly *Meistersinger*.

David Murray

Further performances December 17, 21 and 26, January 23 and 29, February 1.

## Trapped in the convent

The transitory nature of theatre that is one of its joys can also prove an irritation, especially on the fringe, where many productions scarcely make it onto the boards before having to bow out again. With this in mind, BAC in Battersea has taken to reviving fringe hits for a second viewing. One such is *The Nun*, an adaptation of Diderot's novel performed by Greenwich Studio Theatre.

Adapted sympathetically by Julian Forsyth, Diderot's simple tale of a young nun in 18th-century France who feels trapped by her monastic life is surprisingly affecting. And Margaret Forsyth gives the story a staging of such eloquent simplicity that you can-

not help being drawn in. On a cool grey set of stone pillars and arches, where the only warmth is the light from a single stained glass window, the world of the convent comes springing to life. The story is scarcely profound - although it touches on profound matters - but it is handled so gracefully that this never seems to matter.

We follow Suzanne's hazardous progress from one convent to another as she struggles to disentangle herself from the life imposed upon her. Disposed of into a nunnery by her parents she in-

tellectually causes a scandal by refusing to take her vows. But this does not gain her the freedom she desires; instead she is shipped off, like a naughty schoolboy, to an institution better able to deal with her rebelliousness.

Her life is shaped by the three mother superior figures she encounters: the saintly, the sadistic and the sabbic. Ironically, it is the kindly Mother de Moni, who gently encourages her and listens to her, who does her most damage by unwittingly seducing her into taking the veil. Once sworn, she finds herself trapped, prey first to the

cruel behaviour of the vicious Mother Christine and then to the unwanted attentions of the Mother Superior.

Daringly, Diderot touches on the cruelty of a system that can have young girls swearing away their lives at 16 and that, "in an age of atheists and free-thinkers", is reluctant to allow any of them to change their minds; he also raises the issue of lesbian love in the church - strong stuff for the 18th century. But to GST's credit, it does not sensationalise the issues, rather the production steers its way sensitively through them,

while conveying the mounting ire about the abuse of personal freedom that lies at the heart of the story.

Sophie Arnold makes a touching Suzanne (though her limp leaves a lot to be desired) and Mary Ellen Ray is particularly moving as the kindly Mother de Moni. But it is the ensemble acting that is most impressive, as the cast quietly establishes the different moods of the convents and suggests both the warmth and the vindictiveness that groups of women can muster. Well worth reviving.

Sarah Hemming

Continues at BAC, London SW11 to December 8 (0171-223 2222).

## INTERNATIONAL ARTS GUIDE

## AMSTERDAM

EXHIBITION  
Nederlandsche Schiedsrechtmuseum Tel: 31-20-5232311

● Gevangen in het Ijs. Willem Barentsz overwinterd in het Behouden Huys 1595-1597. Exhibition commemorating the Dutch explorer Willem Barentsz and his crew who were stranded on Nova Zembla 400 years ago, searching for a northern route to the Dutch Indies. The exhibition features a reconstruction of the ship and includes objects that were found on Nova Zembla by expeditions in the 1870s and 1890s; to Apr 14

Van Gogh Museum Tel: 31-20-5705200

● St Lawrence Alma-Tadema: retrospective exhibition of the work of the painter Lawrence Alma-Tadema (1836-1912), who was born in the Netherlands, but settled in London in 1870. In Victorian England he became popular for his idealised, but accurately detailed and colourful

scenes of Greek and Roman life. The exhibition features some 70 paintings and a selection of watercolours from international collections; to Mar 2

## ANTWERP

CONCERT  
De Singel Tel: 32-3-2483800  
● Symphony No.5 by Bruckner. Conducted by Philippe Herrewaghe, performed by the Koninklijk Filharmonisch Orkest van Vlaanderen; 8pm; Dec 8

## BERLIN

CONCERT  
Konzerthaus Tel: 49-30-2030900  
● Hagen Quartet perform works by Beethoven; 7.30pm; Dec 5  
● Philharmonie & Kammermusiksal Tel: 49-30-2514333  
● Orchestra Filarmonica de Buenos Aires with conductor Luis Garcia Navaro and pianist Bruno Leonardo Gelber perform works by Weber, Brahms and Berlioz; 8pm; Dec 5

OPERA  
Deutsche Oper Berlin Tel: 49-30-3458401  
● *Maria oder der Mariä zu Richmond*; by Von Flotow. Conducted by Sebastian Lamp-Lessing and performed by the Deutsche Oper Berlin. Soloists include Carol Matrone, Camille Capasso and Klaus Lang; 8pm; Dec 7

## CHICAGO

## THEATRE

Steppenwolf Studio Theatre Tel: 1-912-3351888  
● *Mojo*; by Sutterworth (previews). Directed by Ian Rickson, performed by the Steppenwolf Theatre Company. The cast includes Rob Campbell, Richard Cooper, Evan Handler, Adam Joyce and Martin McClelland; Tue - Fri 8pm, Sat 5pm & 8pm, Sun 3pm & 7pm; to Dec 7 (Not Mon)

## HAMBURG

OPERA  
Hamburgische Staatsoper Tel: 49-40-351721  
● *Amirid*; by Gluck. Conducted by Gard Albrecht, performed by the Hamburgische Staatsoper. Soloists include Sabine Ritterbusch and Gabriele Fossman; 7.30pm; Dec 6, 8 (5pm)

## LONDON

CONCERT  
Royal Festival Hall Tel: 44-171-9604242  
● Massed Chorus of the London Hospital; with conductor Stephen Barker, cellist Julian Lloyd Webber, pianist John Leshman, organ-player Stephen Disley, percussionist Richard Fullbrook and the Fanfare Trumpeters of the Royal Corps of Signals perform Christmas music; 3pm & 7.30pm; Dec 7  
Wigmore Hall Tel: 44-171-9352141  
● Thomas Hampson: performance by the baritone, accompanied by pianist Wolfram Rieger. The programme includes

works by Carl Loewe; 7.30pm; Dec 7

## EXHIBITION

The Hayward Gallery Tel: 44-171-9604242  
● Art of the Insane: Works from the Prinzhorn Collection; in 1922, the German art historian and psychiatrist Hans Prinzhorn published "Artistry of the Mentally Ill", a book which confronted issues of creativity and individual expression by looking at works of art by psychiatric patients. The book was based on the collection, amassed by Prinzhorn, of work made between 1890 and 1920. This exhibition features some 200 works from the collection; from Dec 5 to Feb 23

## MADRID

CONCERT  
Fundación Juan March Tel: 34-1-4354240  
● Maria Aragón: performance by the mezzo-soprano, accompanied by pianist Fernando Turina. The programme includes works by Mollata, Gombau, Martínez, Palau and others; 12noon; Dec 7

## NEW YORK

CONCERT  
Alice Tully Hall Tel: 1-212-875-5050  
● Chamber Music Society of Lincoln Center; with conductor David Shifrin perform works by Fauré, Ravel and Rouse; 8pm; Dec 6, 8 (5pm)

## OPERA

Metropolitan Opera House Tel:

1-212-362-6000  
● L'Elisir d'Amore; by Donizetti. Conducted by Carlo Rizzi, performed by the Metropolitan Opera. Soloists include Rost, Leach, G. Quilico and Nucci; 8pm; Dec 7

## PARIS

OPERA  
Théâtre de l'Opéra Comique Tel: 33-1-42 44 45 46  
● Les Contes d'Hoffmann; by Offenbach. Conducted by Dusan Stefanek, performed by the National Opera of Slovakia. Soloists include Igor Jan, Ida Kinova and Jan Galla (Dec 5), James Lotric, Denisa Slepokovska and Vladimir Kubovick (Dec 6), and Sergei Larin, Jitka Saparova-Fischerova and Peter Mikulas (Dec 8); 7.30pm; Dec 5, 6, 8 (4pm)

## SALZBURG

EXHIBITION  
Rupertinum - Salzburger Landesmuseum Tel: 43-662-80422339  
● Annemarie Avramidis: this exhibition features some 20 sculptures by the Austrian artist Annemarie Avramidis (b. 1939); from Dec 5 to Feb 18

## STUTTGART

DANCE  
Staatstheater Stuttgart Tel: 49-711-20320  
● Ballett Stuttgart: perform George Balanchine's *The Four Temperaments* to music by Hindemith, Frederick Ashton's

Monotones to music by Satie, George Balanchine's *Tchikovsky* - Pas de Deux to music by Tchaikovsky and a new work by Mauro Bigonzetti to music by Shostakovich; 7.30pm; Dec 5

## VIENNA

OPERA  
Wiener Kammeroper Tel: 43-1-5120100  
● Aus allen Blüten Blüthen: by Cech. Conducted by Johannes Wildner, performed by the Wiener Kammeroper. Soloists include Alfons Noventa and Béatrice Pettat; 7.30pm; Dec 5

## WASHINGTON

EXHIBITION  
National Gallery of Art Tel: 1-202-7374215  
● Adolph Menzel (1815-1905): Between Romanticism and Impressionism: this retrospective exhibition comprises about 130 paintings, drawings, pastels and watercolours by Adolph Menzel, one of the leading German artists in the second half of the 19th century; to Jan 5

## ZURICH

CONCERT  
Tonhalle Tel: 41-1-2063434  
● Andrés Schiff: the pianist performs works by Schubert; 10.45am; Dec 8  
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CNBC

08.30  
Squawk Box

10.00  
European Money Wheel

18.00  
Financial Times Business Tonight

## COMMENT &amp; ANALYSIS



Ian Davidson

## Nerve fails in Paris

All the best people now say monetary union will happen, but recent events in France cast doubt on such optimism

All the best people now agree that monetary union in Europe will happen, and on time, in January 1999. Chancellor Helmut Kohl of Germany says it. President Jacques Chirac of France says it. President Jacques Santer of the European Commission says it. The bond markets say it. Even some of Britain's leading economic commentators have started to say it.

And yet a series of events in France in the past week or so raises a dark shadow of a doubt that all the best people may be wrong.

It's not just the French truck drivers' strike, though that was bad enough. The government's craven and incompetent handling of the truckers' disruptive industrial action, and its virtual capitulation before most of their demands, amounts to an alarming failure of nerve on the part of the political authorities and an open invitation to other interest groups to try their luck by similar strong-arm methods.

The problem is that this is one fiasco too many. Mr Alain Juppé's government is desperately trying to cut the budget deficit in order to be able to meet the criteria to qualify for economic and monetary union. But his attempts to reform France's public finances are an uphill struggle, systematically frustrated by the resistance of traditional vested interests.

Moreover, a nationwide industrial dispute like the truckers' strike can only damage the prospects for an economic recovery in France, on which the government's fiscal strategy for Emu is so critically dependent.

But the debacle of the truckers' strike is only one symptom of a much deeper malaise which now seems to be infecting wide sections of the French political establishment over the government's economic policy and its strategy for Emu.

The most serious indication of this malaise is the political sensation caused last month by Valéry Giscard d'Estaing, the former president, when he added his voice to those calling for a devaluation of the franc. What made his campaign so significant was that Giscard was joint founder of the European Monetary System and has long been a fervent supporter of European integration in general, and of Emu in particular.

Le Monde, in a magisterial editorial put-down, tartly commented that a devaluation of the franc was neither economically necessary since France has a large current account surplus, nor politically smart in the European context since Germany has a large current account deficit. If the purpose of devaluing was to generate faster economic growth by a bigger export surplus, it must in part be at the expense of Germany.

Giscard has argued that his aim would be a depreciation of the franc against the dollar, not against the D-Mark. Ideally, therefore, the franc and D-Mark should both devalue in concert. But if that is not possible, then the franc should depreciate alone.

But these are just weasel words. The real implication

Where Emu is concerned, the French political establishment looks as though it could be on the verge of stampeding for the exit

of the controversy is that Giscard and those who think like him have abandoned any hope that France can sufficiently reform its economy internally, and must therefore export its problems by devaluation.

Moreover, this seems to be the way the political wind is blowing. Last week Giscard carried his campaign into the National Assembly, and pulled off one of the most sensational French parliamentary performances of recent years. With Alain Juppé sitting in the prime minister's seat opposite, he delivered a withering condemnation of the government's policy on Emu, and drew spectacular applause not just from some of the Socialist MPs but also from most of the Gaullists sitting behind the prime minister.

In 1992 most of the Gaullists opposed ratifying the Maastricht treaty which had been negotiated by a Socialist government under a Socialist president. What made last week's performance so significant was that the Gaullists were publicly defying the Emu policy of a Gaullist government under a Gaullist president.

Their defiance may make electoral sense because the president and the prime minister are breaking all records for unpopularity. Unless there is an early recovery of growth and employment, the centre-right coalition faces the prospect of losing to the Socialist party in the general elections 15 months away. What is more, the Socialists are themselves publicly defying the Emu policy, and now seem at best lukewarm on Emu.

Where Emu is concerned, the French political establishment looks as though it could be on the verge of stampeding for the exit. It may take a lot of luck, and much more skill than Chirac and Juppé have yet

shown, to keep the herd on track for monetary union.

One reason for the predicament is that France and Germany do not really agree on what Emu is for or how it should work. The Germans want the planned "stability pact" to discipline the budget deficits of national governments by rules that are fixed and automatic; the French (and others) want rules that allow for political judgment. For the Germans monetary stability is an absolute priority, but the French want something like an economic government for Europe which would promote stability and growth.

In the medium run, the French must be right. The Bundesbank does not make monetary policy in Germany in a vacuum but in the context of an economic policy emanating from the political authorities in Bonn. The idea that the future European central bank can conduct a sensible monetary policy for Europe without any effective economic strategy from Brussels seems dotty, to say the least.

Similarly, the French want to use the strength of the single currency to conduct a deliberate foreign exchange policy vis-à-vis the dollar. But the Germans, though they may agree that the dollar is too low, resist any form of interventionism which could jeopardise the overriding objective of monetary stability.

No doubt negotiations over the coming months will produce common texts which look like compromises. The problem is that, for the moment, the German and French political systems have two contradictory objectives: the Germans want stability at all costs whereas the French need growth at any price. It is once again starting to look uncertain whether they can go through the same door together.

## LETTERS TO THE EDITOR

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## Pursuit of highest credit rating not always appropriate goal

From Mr George S. Dallas

Sir, The Lex column's recent comment on triple-A ratings (29 November) is worthy of a high rating itself. While a triple-A rating certainly represents an extremely strong level of credit quality, it was appropriately noted that creditors are not the only stakeholders that a company's management represents. Indeed, there is the shareholder. While this may sound like heresy coming from a rating agency, it is certainly not the case that managing a company to

achieve the highest possible credit rating will also result in it achieving the highest possible share price.

It is also worth pointing out that triple-A is not the only good credit rating. The investment grade spectrum runs all the way through to triple-B. In North America, where the institutionalisation of ratings is more pervasive than it is in Europe, both issuer and investor alike have a strong, and pragmatic, appreciation for the full spectrum of credit ratings. As such, the pursuit of high credit ratings is often

viewed in balance with other strategic goals.

If the culture of ratings is to penetrate deeply into the European marketplace, there will need to be a similar pragmatism among European issuers and investors and a broader acceptance of credit ratings other than the very best.

George S. Dallas, managing director, European ratings, Standard & Poor's, Garden House, 18 Finsbury Circus, London EC2M 7BP, UK

## Benchmark for rights of workers

From Ms Amali De Silva-Mitchell

Sir, I refer to the article "Rich and poor head for WTO summit clash" (November 28), on the debate about the need for promoting basic worker rights.

I would like to pose the question as to whether all parties would be better served if a new International Standards Organisation standard on basic worker rights were established. At present, ISO 9000 on total quality management and ISO 14000 (series) on environmental standards are in existence.

Compliance with a new ISO standard on basic worker rights would be voluntary. This would provide a benchmark for organisations in the developed world to evaluate their trading counterparts in the developing world on a one-to-one basis rather than at a more general, sector or country level.

This may be a feasible compromise and might take the heat out of the debate.

Amali De Silva-Mitchell, 101-1425 Cypress Street, Vancouver BC, V6J 3L1, Canada

## Taxing tourism a short-sighted move

From Mr L.J. Lickorish

Sir, The UK government's decision to double the airport departure tax is the most recent example of the apparently unstoppable tendency to tax international travel - an essential form of modern communication.

OECD, an intergovernmental body to which the UK belongs, made a formal recommendation in 1985 that governments should not tax international travel unless the proceeds are used to fund infrastructure and services. Despite this, countries

introduced higher and higher charges each year.

Tourism is Europe's most important industry and has the greatest potential for growth and the creation of new jobs. But taxes like these merely increase costs and make services less competitive. Europe has been steadily losing its world market share in tourism in recent years. New taxes have hit all segments of the tourism and travel industry.

The European Tourism Action group is currently supporting the World Tour-

ism Organisation in an urgently needed study of taxation of international tourism. The future growth of travel in Europe can no longer be taken for granted if governments continue to take such short-sighted measures as these increases.

L.J. Lickorish, secretary, European Tourism Action Group, c/o ETC, Grammark 61, 1000 Brussels, Belgium

## Emu charade aids Germans in reconstructing the east

From Mr John Goodall

Sir, Lawrence Lindsey's Personal View ("An American View of Emu," November 26) constitutes the most lucid explanation I have yet read of why Emu will not work in Europe.

Clearly, mobility of labour can never take place in Europe on anything like the same scale as in the US and a similar system for fiscal transfer between regions or states experiencing economic booms or recessions neither exists nor is foreseen.

During the Reagan administration in the US, public borrowing rose together with interest rates to finance "star wars" in support of the grand American strategy to

defeat communism. In consequence the dollar rose - and later fell - as investors attracted by high interest rates poured their money into the dollar to finance the US deficit. One way or another the whole world contributed to the US strategy and finally the Berlin wall came down.

Subsequently, the Germans were then faced with the enormous and costly task of rebuilding their eastern provinces. Taking a leaf from Reagan's strategy they too went on a great borrowing binge, but in contrast with the Americans, the Germans understood that a rise in the value of the D-Mark on a comparative scale to the rise in the dollar in the

preceding decade would be catastrophic for the German economy.

So they embraced the Emu project and hitherto have succeeded in holding down the value of their currency by anchoring it to most of the European currencies, especially the French franc.

How much longer will it be before the people of Europe, and more particularly their political leaders, come to understand what the Emu project really is all about?

An ingeniously contrived German can trick to hold down the value of the D-Mark and European interest rates to facilitate the financing of the reconstruction of its eastern Länder, thus

obliging most of Europe to pay its share.

The French lorry drivers who have been on strike may be forgiven if they do not understand this, but there can be little doubt that they know something else; namely that the whole population of France is being taken for a ride by its own blinkered politicians.

Presumably, and hopefully, we now only have to wait and see whether they will bring down the franc, thus bringing to an end this awfully damaging European charade.

John Goodall, Avenue Louise 186, 1050 Brussels, Belgium

## Personal View • Richard Branson

## Open skies for everyone

The UK should use its leverage in air transport to win concessions from the US

Today is a critical day for the future of air transport in Britain. UK and US aviation negotiators meet in London in an attempt to agree a new bilateral air services agreement governing the largest intercontinental air market in the world.

These talks provide both governments with the opportunity to create a truly open skies regime, to the benefit of airlines and the travelling public alike, which could act as a model for all other countries.

Unfortunately, because of attempts to associate the negotiations with the proposed monopolistic alliance between British Airways and American Airlines there is a danger that this opportunity will be missed. Because it is anti-competitive, this de facto merger would be illegal without immunity from US anti-trust legislation, which the US authorities insist will not be granted in the absence of an open skies bilateral deal.

Both governments may be tempted to lower their sights and - under pressure for a quick deal - accept a more restricted agreement. They should not be allowed to do this.

The UK does not enter these negotiations empty-handed. It has considerable leverage, particularly because it can offer access to Heathrow airport for all US airlines. This is something which the US has sought for many years, and it should not be given away without equivalent benefits for the UK.

It is madness to cave in to US demands in return for approval of a commercial agreement which will reduce competition, benefit only one

UK and one US airline and may last for only a limited period.

Despite what it says in public, the US government continues to follow a highly mercantilist policy in aviation negotiations. Its standard open skies agreement reached with other countries, to which the UK is being asked to accede, is designed to favour US airlines while denying UK airlines what they want.

For many years Virgin has supported the UK government in pushing for true open skies in the north Atlantic. All the US demands are acceptable to Virgin, including opening up Heathrow and the granting of so-called fifth freedom rights for US airlines beyond the UK (in other words, the ability of US carriers to pick up passengers in London or Manchester and carry them to Paris, Frankfurt or Moscow).

But in return, the UK must have access to the US domestic market which continues to give US airlines an unfair advantage, and there must be in place a truly effective competition framework designed to protect smaller airlines from anti-competitive behaviour.

These are complicated negotiations, but it is possible to identify several key issues which will have to be addressed.

● Cabotage. This means an airline from one country being able to carry traffic within another. All UK air-

lines are agreed that access to the huge US domestic market is the key to being able to compete effectively across the Atlantic.

BA has taken the commercial decision to gain such access by means of alliances with US carriers. This option is not open to a smaller airline such as Virgin Atlantic, but Virgin does have a powerful brand which is becoming recognised in the US and could operate US domestic air services profitably. It should not be for government to attempt to second-guess the market by dictating that BA's preference is the only one available.

For a foreign airline to operate domestic services would require a change in US law, but there is no reason to believe that the US would not agree in return for access to Heathrow and unlimited fifth freedom rights.

It really is a ludicrous situation. When I open a Virgin Megastore in New York I am welcomed with open arms, just as Tower Records is in London. But try to operate an air service between New York and Boston, using US aircraft and US crew, and governments scream that I am mad!

● Airline ownership. At present US citizens are allowed to own up to 49 per cent of a UK airline; UK citizens on the other hand are restricted to less than 25 per cent of the voting stock of a US carrier. Clearly this is unfair. The US has

announced that it would like to see the US rules brought into line with those in Europe, but we must make sure it happens.

● Fifth freedom rights. These are very valuable to US airlines. The US government has insisted they must be included in an open skies agreement. The UK has so far refused, arguing that the right for US carriers to operate from the UK to continental Europe and beyond is equivalent to the right for UK airlines to carry passengers within the US.

● Fly America. This is a blatant piece of US protectionism. US civil servants and anyone travelling in connection with a US government contract are allowed to fly only on US airlines. UK civil servants on the other hand, are free to travel on any carrier. Fly America has no place in an open skies regime. Nor does the restriction of US mail carriage to US airlines.

● Competitive framework. As government restrictions are removed and an open north Atlantic market is created, it is critically important to ensure that smaller airlines are not squeezed out of business by anti-competitive behaviour. Governments need to create a framework designed to ensure that liberalisation does not result in a return to the cosy airline cartels which did so much damage in the past.

This means effective sanctions and a rapid dispute resolution procedure. A mechanism which produced a decision only after a company had been forced out of business would be no good.

If successful, the difficult negotiations beginning this week will eventually show the world that aviation has grown up and deserves to be treated like any other industry. Real liberalisation, not the half-way house favoured until now by the US, will benefit everyone.

The author is chairman of Virgin Atlantic Airways



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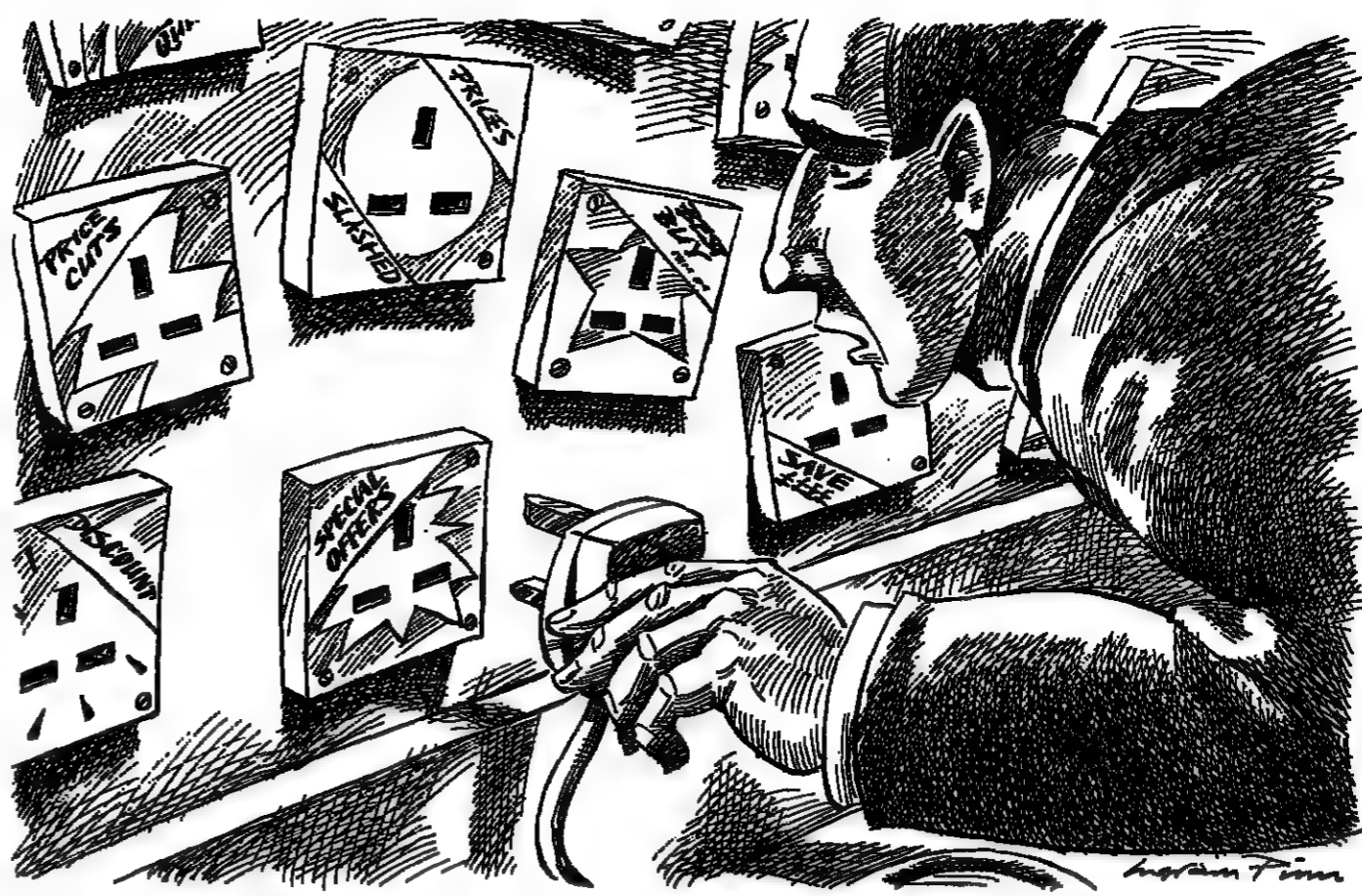
THE CALL CENTRE OF EUROPE

January 1997

## COMMENT &amp; ANALYSIS

## Power to the people

Simon Holberton on the UK electricity industry's plans for the day when consumers will be able to choose their suppliers



## FINANCIAL TIMES

Number One Southwark Bridge, London SE1 9HL  
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Wednesday December 4 1996

## Stability impact

A structure will break if it cannot bend. This is as true of the EMU as of a building. It is a truth that must not be forgotten by negotiators of the "stability pact" designed to constrain fiscal policy within Europe's economic and monetary union. If the fiscal framework that emerges from the present negotiations is too rigid, EMU itself may shatter.

The fundamental notion behind the pact, which is also quite properly present in the Maastricht treaty itself, is that there is a link between fiscal policy and monetary stability. But it is neither a predictable nor a precise link. Under EMU, with its independent central bank and "no bail-out" clause, the link should be particularly weak.

At the same time, the budgets of member states will be the only way to secure cyclical stability: exchange rate flexibility will be lost; interest rates will be common to all; the central budget will be minimal; and labour market flexibility will be limited. It is essential therefore to give member states the widest possible fiscal discretion consistent with securing overall monetary stability.

Arguably, the Maastricht treaty, with its deficit limit of 3 per cent of GDP, was itself too restrictive. The proposed stability pact is tighter still. Its aim is to eliminate what many would consider a perfectly defensible degree of fiscal flexibility. Moreover, if countries were to transgress the limits, the consequences would exacerbate their fiscal problems, thereby sparking intense political friction among members.

Germany's specific suggestion has been that budgets should

normally balance, which is reasonable, but that deficits should also not exceed 3 per cent except when GDP has declined by 2 per cent over four successive quarters. It also wants fines to be imposed on failing participants as automatically as the treaty permits.

Experience shows how draconian these limits might be. Between 1988 and 1993 the UK's fiscal balance moved from a surplus of 1 per cent of GDP to a deficit of 7.8 per cent; between 1989 and 1993, the French balance moved from a deficit of 1.2 per cent of GDP to one of 5.8 per cent; between 1990 and 1995, the Japanese balance moved from a surplus of 2.9 per cent of GDP to a deficit of 3.9 per cent.

In all these cases the swings were far larger than envisaged in the pact. The UK alone would have been able to meet the proposed recession criterion - in 1991. But none of these countries is, or was, on the verge of uncontrollable inflation.

Germany's partners are right to insist on a more generous definition of exceptional circumstances. The imposition of fines must also be a matter of judgment. Yet the most important implication concerns who should be allowed to join EMU.

This sort of stability pact is the German price for an EMU that includes countries whose devotion to stability it does not trust. For this reason, it would be far better to keep initially to a narrow EMU, while permitting automatic fiscal stabilisers to work, than move swiftly to a broader EMU without such fiscal flexibility. The combination of an economically divergent EMU with rigid fiscal constraints is a recipe for disaster. It must be avoided at all costs.

## Police state

Stalin and Mao did it to tighten their grip on power. Now the British government also plans to authorise police to spy on its own citizens, in this case to combat crime. The safeguards which it proposes against abuse of this dangerous practice are much too feeble.

The Police Bill moving unopposed through parliament will allow chief constables to order that any private premises may be bugged or broken into, even when the owner is not suspected of crime. Solicitors will not be exempt, so even the right to independent representation may be compromised.

The police will have very wide powers of discretion as to who is subjected to covert surveillance. A new commissioner will hear complaints against the police, but he will be given only

limited powers to quash snooping orders, will publish no reasons for rejecting a complaint, and will be exempt from judicial appeal. As a minimum, such potentially dangerous powers should be under direct judicial or democratic supervision.

To objections from the Law Society and a senior law lord and to legal opinions that the law will contravene the European Convention on Human Rights, the government replies that the measures are needed to trap organised crime.

Crooks must be caught. But from ancient times, private freedoms have been held equally important. As John Adams, said 200 years ago: "The only maxim of a free government ought to be to trust no man living to endanger the public liberty."

## Asian overtures

The most remarkable and disturbing fact about President Jiang Zemin's visit to India last week was that it was the first by a Chinese head of state. These two potential superpowers of Asia have shunned each other for too long, and the thaw in their relations is much to be welcomed by their neighbours, and the rest of the world.

They have not merely neglected their relationship: they have regarded each other with mistrust and suspicion, and seen themselves as great rivals for influence in the Asian region, and now as future economic giants.

If India had not opted for an intimate relationship with the former Soviet Union, and if China had not precipitated a border war in 1962, it might have been otherwise. But the reality today is that the two know and understand each other little and understand each other's interests even less. They have minimal trade relations; there are no direct flights between Delhi and Beijing, and practically no institutional ties. Such ignorance can breed a dangerous contempt.

In recent years, India has probably been more at fault in dragging its feet than China. But the Indian government also has understandable concerns about its nuclear armed neighbour. It believes that missiles stationed in Tibet can be fitted with nuclear warheads. It sees Beijing lavishing favours upon the military dictatorship in Burma, with the apparent intention of gaining naval access to the Indian Ocean in exchange. And it has long resented the close ties between China and Pakistan, above all in the exchange of nuclear knowhow. Mr Jiang's visit fits into a pat-

tern of earnest efforts by Beijing to improve relations with its neighbouring states. It has signed new border agreements with Russia and four Central Asian republics. And it has showered official visits on a suspicious Vietnam. All are designed to defuse ethnic tensions along its borders.

In these terms, the modest achievements of Mr Jiang's stay in Delhi - confidence-building measures which should eventually lead to troop reductions along their 2,500-mile frontier - are as important symbolically as in practical terms. Other agreements should open direct shipping links and allow co-operation in controlling drug trafficking. The Chinese leader was also at great pains to stress that nuclear relations with Pakistan were entirely peaceful.

He then had to reassure the Pakistani leadership that the improved relations with Delhi would not in any way change their close friendship. But he made it perfectly clear that he saw stability throughout the sub-continent as essential to peace and prosperity in Asia as a whole. And he was scrupulously even-handed in suggesting that India and Pakistan resolve their differences in the disputed territory of Kashmir.

Perhaps it is too much to hope that Mr Jiang might use his good offices to mediate between India and Pakistan that would be contrary to China's practice of non-interference. But any sign of a thaw between Delhi and Beijing can only help defuse regional tension. Both sides should now work to expand their trade relations and restore relations between future superpowers.

In less than 18 months Britain will become the testing ground for the next stage of utilities deregulation. Between April and September in 1998, all 23m consumers of electricity in the land will be given the freedom to choose their supplier.

Britain led the pack in privatising its state-owned electricity supply industry at the end of the 1980s. To many in the UK the legacy of that sell-off is mixed, with boardroom pay scandals and the Labour party's threat of a windfall tax on privatised utilities dominating the headlines. But beyond Britain's shores, from Melbourne to Manila and Los Angeles to Rome, the world has watched and emulated.

The first wave of deregulation was primarily about changing the ownership of electricity assets and creating a market in electricity generation. The next wave is about allowing choice for consumers in buying electricity: the monopoly rights of the 12 regional electricity companies in England and Wales and the two in Scotland to supply power will be abolished.

This promises to be no less revolutionary and no less controversial than the first changes introduced six years ago. As Professor Stephen Littlechild, director-general of Ofwat, the industry regulator, recently told the House of Commons public accounts committee: "We are under no illusion as to the magnitude of the task. The whole concept of competition in electricity supply does not exist outside this country."

The coming of competition has quickened the pace of cultural change within the regional supply companies. Fear of losing customers to competitors is forcing sleepy, bureaucratic organisations to focus on improving their customer service.

Companies are spending millions of pounds on new information technology systems and workforce training to get fit for 1998. Southern Electric, the Maidhead-based regional electricity company, is typical: it has spent £40m over the past three years on IT and staff training. It supplies 2.6m households and wants to increase that figure to 5m.

"The IT allows us to segment the market, know the costs of servicing each customer and to handle inquiries professionally," says Mr Jim Forbes, Southern's chief executive.

Mr Norman Askew, chief executive of East Midlands Electricity, claims that his company's Leicester-based customer service call-centre is the most advanced of all the regional electricity companies. "We don't want to give customers the opportunity to walk away from us because they are not satisfied with our service," he says.

The question few chief executives want to voice publicly, however, is whether all the effort will be worthwhile. They point out that the profit margin in supply, at around 8 per cent of sales, will not allow them to offer big discounts and still make a profit. Electricity is not like gas: in trials in the south-east of England, competitors of British Gas have been able to offer discounts of up to 30 per cent on household bills.

Analysts such as Mr Alex Bennet, of European Energy Economics, the London-based consultancy, go as far as to suggest that

even after further cost-cutting - discounts in electricity prices are likely to be closer to 3 per cent. "Although such a reduction may be sufficient to get some customers to switch it is not likely to be enough to attract many residential customers to move," he says in a paper prepared for the House of Commons trade and industry committee.

A more important issue for some, such as Mr John Reynolds, utilities analyst at HSBC James Capel, is that the introduction of competition might be a fiasco because of administrative problems. He says the industry and the regulator have yet to learn the lessons of the past two market openings in electricity: the one in 1990 for the market for customers using 1MW of power and more, and the other in 1994 for the market for those consuming more than 100kW.

There was poor specification of software and problems in billing. "Throwing extra people at the problems in 1990 and 1994 helped ameliorate the situation - there were only 5,000 and 50,000 customers nationwide. But that solution will be impossible with 23m customers," he says.

Unlike the gas industry, where competition is being tested, no trials will be conducted for elec-

tricity because the electricity supplied to households is backed by expensive, long-term coal contracts. These contracts, which subsidise the coal industry, expire on March 31 1998 and until then prices cannot fall enough to allow substantial discounting.

On Monday Mr Littlechild drew back from the "big bang" approach to competition. Instead of it happening on one day - April 1 - it will be phased in over six months. It is still unclear if this timetable is achievable. No one, least of all Mr Littlechild, expects an IT exercise of the scale under way to be trouble-free from the start. As he noted on Monday: "It is inevitable that when new systems are introduced some unforeseen problems may arise."

Although there is an expectation among industry executives that the timetable for competition will slip further, one chief executive noted that Mr Littlechild has to leave that decision as late as possible. "The worst thing Stephen Littlechild can do is move away from the April start date; he has to keep everyone's feet to the fire."

The renegotiation of the coal contracts has implications for the profits and pricing strategies of generators and of RJB Mining

(the principal successor to British Coal), and will therefore have a rapid effect on the price of electricity sold to consumers.

National Power and PowerGen, Britain's two big fossil-fuel generators, expect their profits to fall, although both claim that the decline will not be dramatic.

"The government-backed contracts [for coal procurement and electricity supply] had a relatively high margin built into them," says Mr Deryk King, chief executive of PowerGen. "It is realistic to expect that the replacement of those contracts will be at a lower margin."

"The fall in margin may exceed the reduction in coal prices and that will have a detrimental impact on profitability. It is not a cliff edge but there is great uncertainty over the extent of the fall."

Analysts estimate that electricity prices could fall by as much as 10 per cent just as a result of ending of the expiry of the coal contracts. Mr Richard Budge, chief executive of RJB Mining, talks openly about renegotiation of the contracts at around 120p a gigajoule, or some 15 per cent less than the value of the coal contracts in March 1998.

"Richard Budge is our largest supplier and we are his largest customer," says Mr Keith Henry, chief executive of National Power. "We've both got an 11th hour but his comes before ours."

Until 1998, the existence of the coal contracts back-to-back with long-term electricity supply contracts will continue to take much of the uncertainty out of generators' and suppliers' businesses. But both groups are now groping for a post-1998 modus vivendi under the watchful eye of the regulator.

The forthcoming loss of regional monopolies has prompted both the regional electricity companies and the generators to forge new alliances to secure customers while keeping

costs under control. The shape of things to come was seen last week when British Energy, the nuclear utility, announced a 15-year electricity supply deal with Southern Electric.

Neither company has disclosed details of the deal, but Southern says it will insulate the company from price volatility in the electricity pool, the market for wholesale electricity. "When 1998 happens it's all about price and your ability to compete on price," notes Mr Forbes.

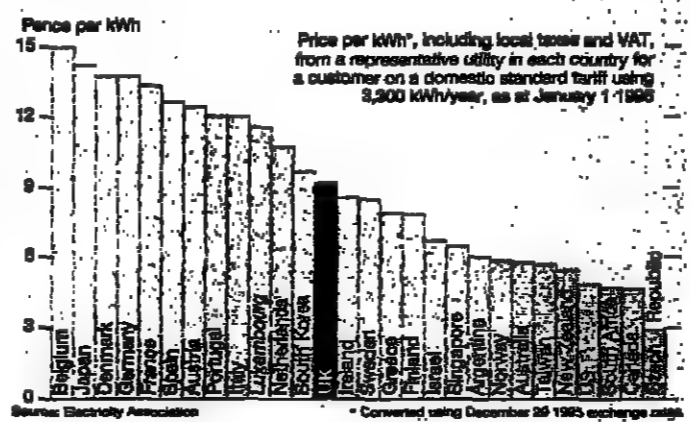
Similarly for British Energy, the deal means that about 15 per cent of its generation output in England and Wales has found a secure home. The other big generators are testing the market for similar deals. National Power, however, fearing regulatory disapproval, has backed away from its idea of forming a joint venture with regional electricity companies and possibly a commercial partner, such as a bank or retailer; the idea was to exploit the post-1998 market by controlling the sale of electricity from generation through distribution and marketing to the power points in British homes.

"I'd like to see a joint venture happen, but I think it is probably a step too far for the regulator," says Mr Henry. "We will opt for long-term alliances instead."

Such an alliance is the favoured path for PowerGen as well. Both generators and suppliers of electricity in the UK expect their margins to come under pressure as supply competition is introduced, but it is likely to be a gradual process that will include further cost-cutting and cautious dealmaking between companies nervous of the regulator.

"On April 1 new arrangements will have to be in place, but the existing generators will still have 100 per cent of the market and the regional electricity companies will still have 100 per cent of supply," says PowerGen's Mr King. "The market will evolve from there."

## UK electricity: more price fails to come



## OBSERVER

## It's no time to throw rice

Victor Rice, trenchant chain-smoking chief executive of LucasVarity, the newly married Anglo-US engineering group, yesterday declared the honeymoon over.

The man who previously cullied 52,000 jobs at Massey Ferguson announced that, following this summer's £3.2bn merger of Lucas Industries and Varity Corporation of the US, a total of 8,000 jobs would go in the automotive and aerospace components group.

But the gravel-voiced chimney-sweep's son is being coy over plans for a new matrimonial name to replace what executives have dubbed the present "transitional tag". Rice has a personal interest in the matter, given that he used his own initials - VAR - in changing the Massey name to Varity. Insiders say LucasVarity is too clumsy and that finding an alternative is in the hands of management consultants. What chance Varucuz?

## Great gondolas

Venetians are a long-suffering bunch. So far this year they've endured an official 85 floodings, defined as when St Mark's

Square is swamped. And memories of the 1995 flood disaster, when St Mark's Square was under 1.94 metres of water, are still fresh. So there has been some irritation at a curious paragraph in an otherwise sensible report by Maurizio Calligaris, the mayor's chief of staff at city hall.

Pooh-poohing the likelihood of a repetition of the 1996 flood, Calligaris suggests that to avoid being inconvenienced by the acqua alta a few simple precautions are sufficient.

Every Venetian is accustomed to donning wellington boots immediately flood-warning sirens sound. Now Calligaris proposes everyone acquires thigh-high boots, giving protection up to 1.60 metres of water. He also recommends moving free boxes, electric power sockets and fresh produce in shops to higher levels.

All of which has exploded upon Venetians with the force of a damp squib.

## Bhopal effigy

No fewer than six separate demonstrations yesterday vied for attention in the Yashwantrao Chavan Park in Bhopal, central India, on the 12th anniversary of the world's worst industrial disaster. They assembled to commemorate the 1984 leak of pesticide gas from

the Union Carbide plant, when 2,000 people died immediately and many thousands more later. They also used the occasion to lambast the local politicians and industrialists they accuse of failing to take responsibility for the mass poisoning. Chief target was Union Carbide's then chairman - and current bail-jumper - Warren Anderson.

A very poor effigy of him was burnt outside a cemetery, where many of the accident victims are buried. Just the kind of thing to encourage him to return to face Indian justice...

## Sum dim lunch

A convivial farewell lunch was staged in London yesterday for Sir David Ford, former chief secretary of the Hong Kong government, who is retiring as Hong Kong's commissioner in the UK.

Only he isn't. No doubt when the invitations went out it still seemed a good idea for Hong Kong to have a new man (or woman) in London around now - presumably an ethnic Chinese who would effortlessly manage the transition next July from representing a crown colony in the mother country, to representing a Special Administrative Region of China in a faraway country full of eager would-be investors.

But with China and the UK

still at loggerheads about the legislative council, the accession bill and other matters, it must be proving difficult to find someone willing or able to expound the views of the present and future administrations with equal aplomb.

Anyway, Governor Chris Patten has asked Sir David to stay on for the time being. But a good lunch, nonetheless...

## Cuban caprice

One of the striking features of the military parade staged in Cuba on Monday, marking Armed Forces Day, was that none of the military vehicles on display actually moved. There was a good reason. Since the collapse of the Soviet Union, communist-ruled Cuba's big buddy, petrol has been in short supply.

So the organisers positioned more than 100 pieces of Soviet-built hardware - including MIG-21 and MIG-23 fighters and MIG-24 helicopters - as a stationary backdrop to the march-past in Havana's Revolution Square. But in case foreign spies imagined Cuba was now defenceless, three Cuban air force MIG-29 jets roared overhead; of course that might have been the last drop of aviation fuel left on the island...

## Financial Times

## 100 years ago

American Pork in France Lyons, 3rd Dec. Yesterday evening a great popular meeting was held, under the auspices of the Agricultural League and the Syndicate of Port Butchers, to protest against the fall in prices caused by the importation of American pork. It was decided to read a petition to Parliament on the subject. Reuter.

## 50 years ago

Occupation Zones In Germany A memorandum of agreement concerning the British and American zones of occupation in Germany was issued yesterday. In the House of Commons the Chancellor of the Exchequer, Mr Dalton, said that the agreement provided for the economic fusion of the British and American zones from 1st January 1947 with the aim of making the combined area self-supporting by the end of 1949. A joint Anglo-American agency would deal with the imports and exports of the combined area, the imports to include necessary raw materials to enable the area to recover and to produce an export income. Barriers in the way of German export trade would be removed as soon as world conditions permitted.

## Tunnel's passenger services to resume

 By Charles Batchelor  
 in London

Eurostar high-speed passenger train services through the fire-damaged Channel tunnel will resume today after clearance was given last night by the Anglo-French safety authorities. But passenger shuttle services, run by Eurotunnel, will not restart until Tuesday.

Eurotunnel, the tunnel operator, was given the go-ahead to run six trains an hour in each direction through the undamaged north tunnel and the undamaged sections of the south tunnel. This amounts to two thirds of normal capacity. Safety clearance represents a breakthrough for the heavily indebted Eurotunnel, which has been losing up to £1m a day in revenues, but is a blow for the ferries and airlines which have sharply increased passenger numbers since the freight fire on November 18.

Eurotunnel said last night: "We are back in business from tomorrow. But we will not be restarting passenger shuttles until Tuesday because there are messages we have to get over to our customers about tickets."

Eurostar is to run 13 trains a day between London and Paris and seven a day between London and Brussels - 90 per cent of normal services - with the first departure the 5.50am today from London to Paris. Journey times will be 20 to 30 minutes longer than usual.

Clearance for the resumption of Eurostar and Eurotunnel's car-carrying passenger shuttle services came 15 days after a fire on a freight shuttle forced the evacuation of 34 people and the closure of one of the two main tunnels.

A decision on the resumption of freight shuttles which - unlike passenger trains - are not completely enclosed, will

have to await the conclusions of the two official inquiries which are being carried out into the causes of the fire.

Mr Eddie Ryder, head of the UK delegation at the Channel tunnel safety authority, said: "The authority is now satisfied that the necessary safety equipment is available and that revised operating and emergency procedures are in place."

Eurotunnel carried out a test evacuation involving 500 staff and their families last Sunday. It will station passenger shuttles at each end of the tunnel ready to rescue people if a train stops inside and will have two emergency rescue vehicles in the service tunnel.

"Remember the service tunnel is a safe haven which is within reach all the time," said Mr Ryder.

Repairs to the tunnel are expected to take up to six months and could cost £30m.

## Labour plans fail to bring S Korea into line

By John Burton in Seoul

South Korea yesterday proposed reforms to its strict military-era labour laws that fell short of commitments made to the Organisation for Economic Co-operation and Development during the country's recent accession negotiations.

The legislation will end a monopoly on trade union activity held by the official Federation of Korea Trade Unions. The outlawed Korean Confederation of Trade Unions, a more militant organisation, will be granted legal recognition next year.

The government has also proposed more labour market flexibility by allowing companies to sack workers. In spite of the tough restrictions on trade union activity, Korean workers enjoy strong job security.

However, the government will maintain a ban on multiple unions in a workplace until 2002. This is likely to reduce the immediate prospects of the KCTU representing workers at company level, where most wage negotiations occur.

Officials have feared that recognising the KCTU, which is strongly supported in the car and shipbuilding industries, could further increase already high wage costs.

A ban on political activity by trade unions will be abolished and a prohibition on outside interference in labour disputes will be eased. Dozens of trade union organisers have been arrested in recent years for violating the ban on third-party involvement.

Civil servants will still be banned from joining trade unions. Teachers will be able to form a trade union from 1999 for limited collective bargaining, but they will be barred from going on strike.

This is well short of the "sole commitment" made by the Korean government during its OECD accession negotiations to bring its labour standards into line with core standards of the International Labour Organisation. In particular, Korea said it would ensure freedom of association and collective bargaining.

The issue of job security rights has recently received attention as Korean industrial groups try to cut jobs in response to a sharp fall in sales and earnings.

The reforms will be submitted next week to parliament for approval.

Trade unions have threatened to stage a general strike if job security rights are relaxed. But it is uncertain how much support they would get, since there is almost full employment in Korea, with only 2 per cent unemployed.

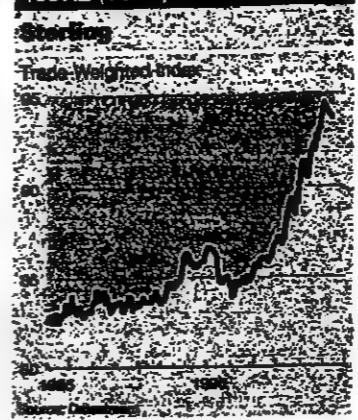
## THE LEX COLUMN

### Sterling stumbles

Sterling's fall from grace yesterday was hardly a surprise. Straight-line rallies are unsustainable, and the trade-weighted index's 18 per cent move in four months was as close to gravity-defying as they come. Technical factors played a big part. With the year-end in sight, there was an understandable enthusiasm to lock in profits on one of the few profitable currency trades this year. Survey evidence also showed global investors to be more overweight in sterling than at any time in the past seven years.

The question now is whether it is all over for sterling, or yesterday was simply the pause that refreshes. Certainly many of the factors that have fuelled sterling's rise remain. The UK is the only leading economy where markets are expecting higher interest rates - a further 75 basis points tightening is priced in. In Germany expectations of higher rates have disappeared in recent weeks. It also remains the highest-yielding leading bond market in Europe, bar Italy, while secondary factors like a buoyant oil price and healthy current account remain supportive. These should prevent any dramatic collapse.

But there have also been changes which suggest the recent highs around DM3.64 and \$1.69 are unlikely to be beaten soon. Business has started to squeal about the adverse effect of a strong currency, and whatever undervaluation existed has been erased. Short of further D-Mark devaluation, or unexpected economic strength, further gains are unlikely.

**FT-SE Eurotrack 200:**  
 1937.2 (+16.6)


the latter is already muttering about doing so.

In short, long-run expectations should not be overimpressed by a booming spot price. Yet this, it seems, is precisely what has occurred. It is doubtful, for instance, that there is much fundamental justification for an increase of nearly \$3 a barrel in the 12-month Brent futures price compared with its level a year ago.

This has particular implications for equity investors. Oil company shares have outperformed world markets by more than 10 per cent this year. True, there have been real performance improvements. But investors have been impressed too by a galloping oil price. The threat to oil shares from a more realistic environment next year is obvious.

### Oil

Oil bears have had a terrible year. The price has spurred to extraordinary highs, thanks to depleted stocks and the non-arrival of expected fresh supply - notably from Iraq and the North Sea. Now the industry finds itself facing another winter with low stocks. It is small wonder that even the renewed prospect of Iraqi supplies has failed to shift the price much.

Still, the temptation to celebrate a fundamental change in the oil price outlook should be resisted. The additional supply everyone expected last year has been delayed, not eliminated. And even at prices well below current levels, returns on new production look attractive. Sustained high prices could also risk tempting the likes of Saudi Arabia and Kuwait to step up their output.

### LucasVarity

Amid all the excitement surrounding the £2.2bn (\$3.3bn) merger of Lucas and Varity, the stock market seems to have lost sight of the fact that adding together two cyclical car parts companies would simply produce one big cyclical car parts company. Yesterday's announcement from LucasVarity, citing patchy demand for its heavy-duty brakes, diesel fuel injection systems and Perkins engines, served as a sharp reminder of the fact - and lopped nearly 7 per cent off the shares. Relative to the market, they are now back to where they were when trading in the combined entity started in September.

That seems unduly pessimistic, since the group's much-needed restructuring is proceeding faster than even the optimists had hoped.

Mr Victor Rice, the chief executive, has identified £120m of cost savings over the first two years, twice the level forecast initially. Admittedly, he is taking twice the exceptional charge - £250m - to cover asset writedowns and a 15 per cent reduction in the workforce. But given the stubbornly conservative culture at Lucas, the more radical the shake-up, the better.

If there is a disappointment, it is the rather limited range of potential disposals. The 13 businesses that are up for sale amount to only 6 per cent of group turnover. They still leave LucasVarity stretched across seven divisions, but with few market leading positions. This, even more than the restructuring, is the real challenge for Mr Rice.

### Pernod Ricard

What do you get when you stick Two Dogs together with Pernod Ricard? Sadly, the answer is probably three dogs. This is an acquisition Pernod did not need to make. Pernod has significant drinks distribution in Europe, along with expertise in fruit drinks through Orangina. Alcopops, the faddish alcoholic soft drink, are therefore an obvious product, but Pernod does not need to buy a brand. Hooper's Hooch, the Bass start-up, has already substantially outstripped Two Dogs, and there are other copycats emerging. Besides, the European rights for Two Dogs have gone to Merrydown, so Pernod cannot even sell alcopops on its home turf.

This smacks of a lack of strategic direction from a company which badly needs to do some big deals. Pernod has strong cashflow from its French main brands, but it faces a steady decline in volumes. Pernod's international brands, from Jameson to Wild Turkey, are doing well, but from a very low base. And, given a limited brand range, the group is struggling to justify the cost of its global distribution network - like Rémy Cointreau, but without the debt.

The obvious way forward would be either to acquire some significant brands, form spirits distribution partnerships or sell out. Orangina would be highly attractive to one of the soft drinks giants, and the Irish whiskey business would be lapped up by the spirits giants. But the Ricard family has control and shows no sign of wanting to fund large acquisitions or cash in its investment. So Pernod shares look likely to remain in the dog house.

## Brussels plans to force makers to recycle old cars

By Layla Boulton in London

The European Commission is finalising plans to oblige car-makers to take back disused cars and recycle their components. It emerged yesterday.

Mr Ludwig Krämer, the Commission official responsible for waste management, said the aim was to increase the industry's use of recyclable components and cut the amount of car scrap sent to landfill or simply abandoned.

But the plan, designed to help both the environment and the smooth functioning of the European Union's internal market, is certain to spark complaints from carmakers.

Several manufacturers have already concluded more flexible voluntary recycling agreements with a handful of governments.

Mr Roger King, director of public affairs at the UK's Soci-

ety of Motor Manufacturers and Traders, said the industry was lobbying the Commission to pursue a voluntary approach. But he added: "If we don't succeed then compulsion by the European Commission could obviously be a last resort."

Mr Krämer said the plan would probably be published early next year.

If approved by the Council of Ministers, the rules could take effect in 2002, when manufacturers would have to begin producing cars that would be easy to recycle.

Some EU nations already have facilities dedicated to dismantling cars. Several producers, such as Volkswagen, have changed the way they build cars to make them easier to recycle. Others, particularly the poorer EU members, have no recycling provision.

German efforts on recycling

are the most advanced in the EU. An estimated 1.5m to 2m cars are recycled in Germany, out of a total of 2.5m cars that reach the end of their useful lives every year.

Mr Krämer said mandatory recycling rules would benefit car manufacturers by providing a level playing field throughout the EU. They would apply to all cars sold within the union by both EU and non-EU manufacturers.

"We do not believe it is in the... interest even of car manufacturers to have national agreements and framework laws which are different from one state to another," Mr Krämer said.

Details of car manufacturers' obligations have yet to be worked out, Mr Krämer said. But additional costs that could not be recovered from selling recyclables would ultimately be passed on to consumers.

## Paris bombing

Continued from Page 1

Paris and Lyons, and in Lille. The attacks led to a large number of arrests and a manhunt over several days by police in Lyons which culminated in them shooting dead Khaled Kelkal, one of the principal suspects in the investigation.

Police last night reactivated the "Vigipirate" security plan launched in the wake of last year's attacks, which involved drafting in soldiers alongside additional police in Paris and other cities, and sealing rubbish bins and other potential locations for bombs.

## Boeing and McDonnell Douglas

Continued from Page 1

year of on-off talks between the US companies which led to speculation about a merger. Although it is limited to wide-body aircraft, the unusually close collaboration could mark a turning point in the groups' relationships - and in McDonnell's fortunes.

The agreement is "win-win" for both companies, Mr Ron Woodward, Boeing's commercial aircraft chief, said yesterday. "We have a record number of orders and several develop-

ment programmes. McDonnell Douglas has excellent design and production capabilities that are not being fully utilised," he added.

Boeing, which has been rehiring workers laid off in the last recession to meet fast-mounting orders, last month signed another novel deal under which it will be the exclusive supplier to American Airlines until 2018.

The arrangement, with firm orders and options on up to 630 Boeing aircraft, could be worth more than \$30bn (£18bn).

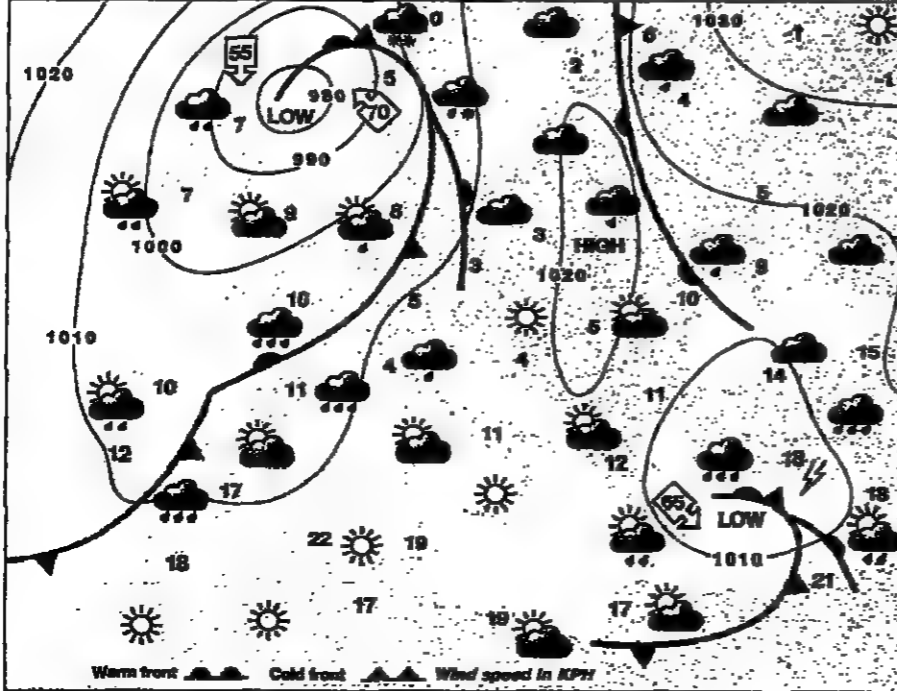
## FT WEATHER GUIDE

### Europe today

A low over the North Sea will cause unsettled, windy conditions in Scotland and southern Norway. Scotland and Ireland will have numerous showers. Southern England will stay mainly dry with sunny periods. Patchy rain associated with the low will stretch from Denmark and southern Sweden across Germany and France to northern Spain. Showers will affect Portugal and the Spanish plains. Eastern Spain will be dry and rather sunny. High pressure will promote dry but cloudy conditions in Poland and the Baltic states. Italy will have ample sunshine. The Aegean and southern Turkey will have numerous thunder showers.

### Five-day forecast

Southern France and northern Italy will be very wet during the next couple of days. The southern Alps will have fresh snow above 1,500 metres. Central Europe will stay dry. High pressure will also promote dry conditions in the Balkans.



### TODAY'S TEMPERATURES

Madrid	18	Belfast	shower	6	Casablanca	shower	19	Gibraltar	showers	15	Manchester	showers	7	Rome	8		
Casula	18	Belgrade	cloudy	4	Chicago	fair	0	Glasgow	shower	7	Marla	rain	29	S. Francisco	8		
Agra Dhah	sun	28	Berlin	cloudy	7	Cologne	rain	9	Hamburg	rain	8	Melbourne	fair	18	Seoul	8	
Alzira	fair	31	Bermuda	fair	20	Dallas	sun	26	Helsinki	rain	3	Monaco City	showers	21	Singapore	8	
Amsterdam	showers	8	Bombay	rain	22	Darm	sun	21	Hong Kong	showers	21	Montreal	showers	1	Singapore	8	
Athens	sun	14	Brussels	shower	9	Dubai	sun	22	Honolulu	fair	26	Milan	clouds	8	Strasbourg	8	
Bahia	showers	8	Buenos Aires	showers	10	Durham	sun	26	Istanbul	cloudy	14	Minneapolis	fair	0	Sydney	cloudy	8
B. Alire	showers	32	Chagan	rain	5	Dubrovnik	sun	12	Jersey	showers	10	Munich	cloudy	3	Taipei	8	
Uman	cloudy	7	Calro	fair	21	Edinburgh	windy	7	Karachi	sun	28	Nairobi	fair	25	Tokyo	8	
Bangkok	sun	34	Cape Town	fair	21	Para	shower	17	Kuwait	sun	23	Naglas	sun	14	Toronto	8	
Barcelona	sun	24	Casaca	rain	9	Portofino	sun	22	Kuala Lumpur	sun	22	Nassau	sun	14	Vancouver	8	
Beijing	sun	2	Cardif	showers	8	Geneva	rain	9	Las Palmas	fair	22	New York	fair	7	Venice	8	





مكتبة

COMPANIES AND FINANCE: EUROPE

Sideways move seen as grooming Demel for chairmanship of the German carmaker

# Audi head goes to VW Brazil

By Wolfgang Münchau  
in Frankfurt and Heig  
Simonian in London

Mr Herbert Demel, chairman of Audi, Volkswagen's executive cars subsidiary, is to head VW's big South American operations in a move that could pave the way for an eventual bid for VW's chairmanship.

The shift will be confirmed at a meeting today of Audi's supervisory board, which will appoint Mr Franz-Josef Pheggen, Audi's head of research and development, as new chairman.

The moves follow a string of job changes within VW this week provoked by the resignation of Mr José Ignacio López, VW's head of production and purchasing.

Mr Demel is replacing Mr Pierre-Alain de Smedt, who is to become chairman of VW's Seat subsidiary in

Spain. However, the move is not connected to the departure of Mr López, whose role as head of the supervisory board of VW do Brazil has been assumed by Mr Ferdinand Pisch, VW chairman.

Mr Demel's sideways move probably masks an attempt to groom him as a potential successor to Mr Pisch. The two men worked closely together at Audi when Mr Demel was in charge of research and development during Mr Pisch's time as chairman.

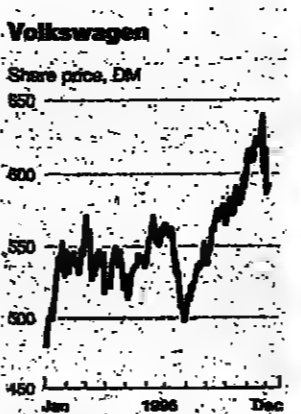
While Audi has thrived under Mr Demel, he lacks foreign experience. Taking charge of the Brazil operation, which includes responsibility for Argentina, would give him his first taste of running a big company outside Germany.

VW do Brazil, VW's biggest foreign subsidiary, has seven plants and is a local

market leader. Although the DM10bn (\$6.5bn) annual sales at the South American operations are smaller than Audi's forecast DM18bn this year, output at the two units is similar.

Separately, German analysts yesterday calculated VW's shares could slump by between 15 and 20 per cent in a "worst-case" scenario should GM secure large damages in its US civil court case against the German carmaker over alleged industrial espionage.

Ms Rola Kautz, BHF analyst, said the shares could fall from yesterday's close of DM522 to DM480 if GM were to win \$5bn in damages under the Racketeer Influenced and Corrupt Organisations Act (RICO). Under RICO, a US law used in the fight against organised crime, a court can award triple damages.



Herbert Demel: Audi has thrived under his leadership



Herbert Demel: Audi has thrived under his leadership

Mr Falk Frey, analyst at Bank Julius Bär, a Frankfurt-based bank, calculated that VW shares could fall DM90. He also reclassified VW as a high-risk stock, while retaining a buy recommendation.

GM has accused VW of industrial espionage with

the appointment of Mr López, a former GM executive, to the board of Volkswagen in March 1993. Adam Opel, GM's German subsidiary, alleges Mr López stole internal documents and made them available to VW.

Mr Frey of Bank Julius Bär said VW was strong

enough to withstand the worst possible outcome of a court case. "Even the worst case conceivable would not jeopardise Volkswagen as a corporation," he said.

German state prosecutors are expected shortly to bring a criminal indictment against Mr López.

EUROPEAN NEWS DIGEST

## SMH forecasts record sales

SMH, the world's biggest watchmaker, expects record sales in 1996. Mr Nicolas Hayek, chairman of the Swiss company, whose brands range from the luxury Blancpain to the mass-produced Swatch, said yesterday he expected group sales to rise between 5-7 per cent this year and be close to the 1992-93 figure of Sfr2.8bn (\$2.13bn).

He said October had been a record month, with sales in the US, Japan, UK and Asia doing "very well". SMH profits, which peaked at Sfr441m in 1993, have been hit by the strength of the Swiss franc. SMH exports the bulk of its output. Mr Hayek said the strength of the Swiss franc had meant that the amount SMH received for a 150,000 watch in Italy, for example, sank from Sfr52 in 1992 to Sfr32. However, the Swiss franc's recent weakness had raised SMH returns and 1996 would be a "good year". How good, however, depended on December, which accounts for 15-20 per cent of annual sales. SMH's registered shares closed 2.5 per cent higher yesterday, at Sfr195.75.

William Hall, Zurich

## Banco di Napoli draws lone bid

The Italian Treasury is now able to authorise the planned L2,000bn (\$1.32bn) capital increase in Banco di Napoli after receiving a commitment from only one institution to present a bid for its 60 per cent stake in the bank. By the deadline on Monday night only Mediobanca Centrale, the credit institution wholly owned by the Treasury, had said it would definitely take part in the auction planned for December 20. Although other bids may still be lodged, Mediobanca Centrale now has a pre-emptive right of acquisition. It is understood that the European Commission will not object to its bid because of the transparency of the process.

John Simkins, Milan

## Compagnie Bancaire sells stake

Compagnie Bancaire, the French banking group, yesterday raised FF1.5bn (\$237m) by selling a 5 per cent stake in Cetelem, its consumer credit subsidiary. As a result, Compagnie Bancaire reduced its holding in the unit from 72 per cent to 66 per cent and increased the free float of the shares by about 21 per cent. The 1.28m shares were sold at a price of FF1.175 per share - a 5 per cent discount to yesterday's closing price of FF1.239.

The sale was carried out through a block trade, with Paribas acting as bookrunner and SBC Warburg as joint lead manager. A block trade - also known as a bought deal - involves a bank buying a block of shares using its own capital, to sell to investors at a profit. Compagnie Bancaire is listed on the Paris Stock Exchange where 51 per cent of its shares trade; the rest is held by Compagnie Financière de Paribas.

Conner Middlemann, London

## Ericsson in Brazil move

Ericsson, the Swedish telecommunication company, has acquired the majority of votes in its Brazilian associated company Ericsson Telecomunicacoes. The acquisition was made through a swap of preference shares for the same number of voting shares with Metel, the local controlling shareholder in Ericsson Telecomunicacoes. Ericsson's total holding in the company remains at 60.5 per cent.

AFX News, Stockholm

Comments and press releases about international companies coverage can be sent by e-mail to [international.companies@ft.com](mailto:international.companies@ft.com).

## Corporate raider builds 27% stake in Cofide

By John Simkins in Milan

Mr Luigi Giribaldi, the Monte Carlo-based corporate raider who has been buying shares in Cofide, the quoted holding company of Mr Carlo De Benedetti, said yesterday that, together with allies, he now controlled about 27 per cent.

A stake of this size could put Mr Giribaldi in a position of some influence in the event of any restructuring of the companies controlled by Cofide or Cir, an industrial holding company in which Cofide has a 43.7 per cent

stake. Through Cir, the De Benedetti family holds 15 per cent of Olivetti, the troubled Italian information technology company.

Mr Giribaldi, a 71-year-old businessman, first bought shares in Cofide in February. He said then he foresaw "friendly collaboration" with Mr De Benedetti, whom he knows personally. Since then he has been reticent about his intentions and, when he continued buying the shares, speculation arose as to whether he was acting in concert with Mr De Benedetti or whether he had hostile intentions.

In an interview yesterday, Mr Giribaldi refused to be drawn on his plans. However, he said there was no "war" with Mr De Benedetti and that he was "very willing" to have closer ties. "A lot depends on Mr De Benedetti and whether we talk or see each other," he said. "I respect Mr De Benedetti and have a lot of faith in him."

Mr Giribaldi said he had 20 per cent of Cofide and, with three or four allies, he controlled about 27 per cent. On reaching 20 per cent, a shareholder has the right to call an extraordinary meeting.

Mr Giribaldi said he had continued to buy Cofide shares because their low price for much of this year had made them a good investment. The shares, which last night closed down 1.56 at 1,762.1, fell below 1,400 in September. Mr Giribaldi said his shares had cost an average 1,520.

He said that "for now" he had no plans to take his stake beyond 20 per cent. "My investment and the safeguarding of my interests is my principal concern," he said. Mr Giribaldi added that he also held 5 per cent of Cir. "I like Cir a lot - it

has interesting assets," he said.

On Monday, when it became clear Mr Giribaldi had reached 30 per cent, Cofide was quick to point out that the company was controlled by a shareholders' pact, due to run until 2000, which accounts for 48.99 per cent of the capital. It includes Mr De Benedetti, the insurance group Generali, the merchant bank Mediobanca, and Mr Carlo Caracciolo, chairman of the L'Espresso publishing group. Sources close to the De Benedetti family said Mr Giribaldi was regarded as a neutral figure.

## Bank deal triples year's volume on Ukraine SE

By Matthew Kaminski  
in Kiev

Bank Ukraina, the former agricultural state bank, yesterday placed 5.4 per cent of its shares with western institutional investors, nearly tripling the year-to-date volume on the Ukrainian Stock Exchange.

The 3m hryvnia (\$1.7m) deal, the largest trade on a regulated Ukrainian second-

ary equity market, matched all the year-to-date activity on the computerised "over the counter" market.

The joint-stock bank sold 273m shares at a nominal price of 0.011 hryvnia as part of its drive for foreign investment.

Ukraine plans a share issue by April that would give the European Bank for Reconstruction and Development a 20 per cent stake,

according to Mr Tomas Fiala, director of the Kiev office of Wood & Company, a Prague-based brokerage which handled yesterday's sale.

Ukraine is the biggest bank in Ukraine, with assets of \$1.5bn that gave a return of 12.5 per cent last year. Its return on equity is 33 per cent, twice the current yield on Ukrainian government treasury bills.

Ukraine has 228 commercial banks with total assets of \$9bn.

State interference in Ukraine's activities casts a shadow over the formerly government-owned bank's finances. Half its loan portfolio remains in agriculture as the government forces through loans to the struggling sector. Non-performing loans have fallen from 49 per cent of the portfolio

at the start of this year to 22 per cent.

The bank also carries an unwieldy staff of 26,000 that analysts believe must be cut by at least 10 per cent for Ukraine to maintain a competitive position.

But traders welcomed the upsurge in activity on the country's sleepy exchanges. Total volume on the Ukrainian exchange, which lists just four shares, was 725,000

hryvnia this year until 1.8m hryvnia in Ukraine shares changed hands yesterday. The OTC market, which handled the remainder of the shares, has seen 900,000 hryvnia of stock traded since its inception in July.

Analysts estimate Ukraine's opaque secondary markets unofficially handle up to \$1.5m in securities a day. Total market capitalisation has been put at \$1bn.



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November 1996

**CITIBANK**

1996 FINANCIAL  
REPORT

Scotiabank

## Consolidated Statement of Income

(Canadian \$ millions except per share amounts)

For the year ended October 31	1996	1995
<b>Interest income</b>		
Loans	\$ 7,881	\$ 8,007
Securities	2,001	1,932
Deposits with banks	740	557
	<b>10,622</b>	<b>10,536</b>
<b>Interest expense</b>		
Deposits	5,014	6,186
Subordinated debentures	214	205
Other	812	1,048
	<b>7,040</b>	<b>7,421</b>
<b>Net interest income</b>	<b>3,582</b>	<b>3,115</b>
Provision for credit losses	380	560
<b>Net interest income after provision for credit losses</b>	<b>3,202</b>	<b>2,555</b>
<b>Other income</b>		
Service charges	439	394
Credit fees	337	292
Investment banking	422	261
Foreign exchange and precious metals	164	118
Other	418	492
	<b>1,780</b>	<b>1,557</b>
<b>Net interest and other income</b>	<b>4,982</b>	<b>4,112</b>
<b>Non-interest expenses</b>		
Salaries	1,702	1,438
Pension contributions and other staff benefits	208	214
Premises and equipment expenses, including depreciation	664	588
Other	643	604
	<b>3,217</b>	<b>2,844</b>
<b>Income before the undetected:</b>	<b>1,765</b>	<b>1,268</b>
Provision for income taxes	665	371
<b>Non-controlling interest in net income of subsidiaries</b>	<b>31</b>	<b>21</b>
<b>Net income</b>	<b>\$ 1,069</b>	<b>\$ 876</b>
Preferred dividends paid	\$ 113	\$ 104
<b>Net income available to common shareholders</b>	<b>\$ 956</b>	<b>\$ 772</b>
Average number of common shares outstanding (000's)	234,358	228,598
<b>Net income per common share</b>	<b>\$ 4.08</b>	<b>\$ 3.38</b>
<b>Dividends per common share</b>	<b>\$ 1.30</b>	<b>\$ 1.24</b>

## Consolidated Balance Sheet Highlights

(Canadian \$ millions)

As at October 31	1996	1995
<b>Cash resources</b>	<b>\$ 14,737</b>	<b>\$ 16,728</b>
Securities	25,905	21,974
Loans	104,733	97,088
Other assets	11,886	11,399
<b>Total assets</b>	<b>\$ 157,261</b>	<b>\$ 147,189</b>
<b>Deposits - Personal</b>	<b>\$ 47,768</b>	<b>\$ 45,538</b>
Business and governments	44,961	41,747
Banks	25,145	24,060
<b>Total deposits</b>	<b>117,874</b>	<b>111,345</b>
Other liabilities	28,357	25,275
Subordinated debentures	3,251	3,249
Equity - Preferred	1,325	1,575
Common	5,424	5,745
<b>Total liabilities and equity</b>	<b>\$ 157,261</b>	<b>\$ 147,189</b>

**Note 1:** The Condensed Consolidated Financial Statements have been prepared in accordance with generally accepted accounting principles including the accounting requirements of the Superintendent of Financial Institutions Canada. The statements include the assets, liabilities and results of operations of the Bank and all of its subsidiaries and effectively controlled associated corporations after the elimination of intercompany transactions and balances. Investments in associated corporations, where the Bank has significant influence or holds at least 20% but not more than 50% of the voting shares, are accounted for on the equity basis.

**Note 2:** As at October 31, 1996, 237,448,511 common shares were issued and outstanding (October 31, 1995: 232,256,402). The per share statistics have been based on the daily average of equivalent fully paid common shares.

**Note 3:** The Shareholders' Auditors have audited and reported on the Consolidated Financial Statements of the Bank as at and for the years ended October 31, 1996 and 1995. Their report is included in the Annual Report.

**Note 4:** Certain comparative amounts have been reclassified to conform with current year presentation.

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NOVA SCOTIA

USD 21,000,000

Short Term Loan Facility

Borrower

Rossiyskiy Kredit Bank, Moscow

Arranger and Agent

Raiffeisen Zentralbank Österreich AG  
(RZB-Austria)

Syndicate

Raiffeisen Zentralbank Österreich AG  
Banco do Brasil AG Komercijelna Banka a.s.  
Bank Handlowy International S.A. Bank Handlowy W. Warszawie SA  
Banker Bank AG BNP Bank AG London Branch  
Centro Internacional Handelsbank AG Hesse Newton & Co.  
Mayer Koller & Koller Bank AG Poincaré & Co.  
Die Erste Österreichische Spar-Cassa-Bank AG Keresztvárosi és Hitelbank Rt.

RZB X

Raiffeisen Zentralbank Österreich  
Allgemeinwissen  
RZB-Austria

September 1996

**MORTGAGE FUNDING CORPORATION NO. 6 PLC**  
£134,500,000  
Class A1 Senior Mortgage Backed Securities  
Rating: AAA (Moody's) / Aaa (S&P)

Class B1 Mortgage Backed Securities  
Rating: BBB (Moody's) / Baa1 (S&P)

For the period December 02, 1996 to March 03, 1997  
the interest rate will be fixed at 11.75% p.a.  
Next payment date: March 03, 1997  
Coupon rate: 12%  
Amount: £17,970,145 for the denomination of £100,000  
FRF 29 70/32 for the denomination of £100,000

THE PRINCIPAL PAYING AGENT  
SOCIÉTÉ GÉNÉRALE  
BANK & TRUST LUXEMBOURG

**SCA SOCIÉTÉ GÉNÉRALE**  
ACCEPTANCE N.V.  
FRF 29 70/32 REVERSE  
FLOATING RATE NOTES  
DUE JUNE 2003  
MIN CODE: 330043998

For the period December 02, 1996 to March 03, 1997  
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Next payment date: March 03, 1997  
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THE PRINCIPAL PAYING AGENT  
SOCIÉTÉ GÉNÉRALE  
BANK & TRUST LUXEMBOURG

**TOSHOKU FINANCE NETHERLANDS B.V.**  
US \$10,000,000  
Floating Rate Notes 1998

Interest Period: 4th December, 1996  
to 4th June, 1997  
Interest Rate: 6.25% per annum

Next Payment Date: 4th June, 1997  
per US \$10,000 Note US \$10,000

Nippon Credit International Limited  
London  
Agent Bank  
4th December, 1996

## NEWS: THE AMERICAS

## Eaton plans gentle cycle ride

Chrysler aims to smooth out highs and lows with an export push

Robert Eaton, chairman of Chrysler, is riding high in the US automobile industry this year.

Perhaps it is that success that enables him to look with equanimity on his company's retreat from the world stage in the 1980s, at a time when Chrysler was striving to fend off bankruptcy. Mr Eaton says now: "Almost going broke and selling the international operations - and then starting over - turned out to be an extremely lucky break for us."

Chrysler executives never tire of pointing out that, unlike rival Ford, which is undergoing a convoluted global overhaul, they are able to build an integrated international business from a blank sheet of paper.

That is one way of looking at it. From another point of view, though, Chrysler faces a predicament unique among the world's big automobile companies: it generates almost all of its business at home. And in such a cyclical industry, being tied to a single economy can be crippling.

Mr Eaton has now launched the company on what amounts to one of the US's most ambitious export drives. His aim, he says, is to double Chrysler's international sales, to 500,000 vehicles a year, by the end of the decade, then double them again sometime in the decade after that. One early sign of that push is that the company now makes five right-hand drive vehicles, an indication that it is finally getting serious about attacking markets such as Japan.

This export drive, which echoes the international development of the Japanese carmakers in an earlier period, has so far drawn strong support on Wall Street. "They're taking a very disciplined, conservative approach," says Mr Nick Lohocarro, auto industry analyst at Bear Stearns. "They are trying to become an international player - but not to get themselves into any risky situations."

A sign of that discipline, adds Mr David Healy of Burnham Investments Research, was Chrysler's decision to walk away from a planned Chinese investment last year after the demands from Chinese negotiators rose steadily. "The last thing they're going to do is build a big new assembly plant in Europe or China," he says.

Underpinning Chrysler's new push into international markets is a North American production base that has set the company alongside



Robert Eaton: 'Almost going broke turned out to be a lucky break for us'

Toyota, as one of the world's most efficient car and truck manufacturers. Using that base also keeps overheads down and makes it possible to spread vehicle development costs more widely. "There isn't any place we could produce this efficiently," says Mr Eaton.

That strategy, though, depends greatly on the future direction of the dollar. Until it reversed course last month, the US currency had risen steadily against the Japanese yen for a year and a half, eating into the global currency advantage that has been one of the engines behind Detroit's 1990s revival. That has served to slow Chrysler's move into the Japanese market, where it took control of a local distributor and considerable publicity in 1995.

Despite the dollar's strength, though, most economists in Detroit continue to project a steady weakening of the greenback against the yen, driven by the continuing large trade imbalance between the two countries. That Japanese carmakers hold a similar view is suggested by the continued investment by companies such as Toyota and Honda in new US facilities. "I see [the Japanese] very definitely expanding their investment in the US," says Mr Jim Har-

bour, a US auto industry consultant. "They don't want to be butchered by the yen any more."

To supplement its US manufacturing base, Chrysler plans to continue making what Mr Gary Valade, chief financial officer, calls "opportunistic" investments in manufacturing facilities overseas. These include a plant in Argentina, which is due to begin assembling Jeep Grand Cherokees early next year, and a joint venture with BMW in Latin America to build engines.

Chrysler is also in the process of raising output at its joint-venture plant in Austria, where production of Voyager minivans will be raised in April through the addition of a third shift. International expansions like these provide additional production capacity or access to markets where import restrictions apply, but "don't weaken the aim to expand export opportunities" from the US, says Mr Tom Gale, head of Chrysler's international operations.

While basing its vehicle development and production operations on the US, the company has set out since last year to strengthen its grip on its global distribution channels. That has included taking control of its dealer networks in countries like Italy, France and Japan. So far, though, these

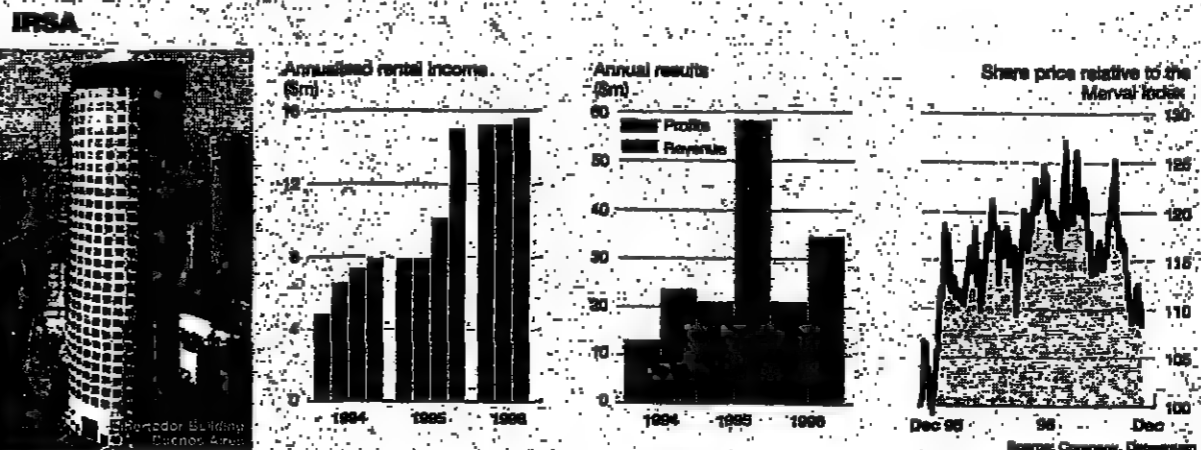
efforts have yet to yield significant extra overseas sales. Largely because of a collapse in the Mexican automobile market in the wake of the peso's devaluation, Chrysler's international sales last year, at about 241,000, were some 5 per cent lower than the year before.

That has not changed the game plan. "The aim is to build a counter-cycle to the US," says Mr Gale. European markets remain depressed, putting them on a different cycle from the US, while growth in demand for new vehicles in Asia suggests that cyclicality will not develop until "way out into the future".

The geographic balance of which Chrysler executives dream, however, will not come about in this, or even possibly the next, business cycle. And lifting the company's overseas sales past the 1m mark would take the international share of its total vehicle sales from 5 per cent at present to about 25 per cent. Other big carmakers generate 35 per cent or more of sales outside their home markets.

For now, Chrysler will have to count for its prosperity on its ability to ride the US economic cycle better than it has in the past.

Richard Waters



## IRSA finds room for growth

Argentine property group aims to exploit transformed economy

The Mexican currency crisis was a wonderful opportunity for property developers, according to Mr Marcelo Mindlin, vice-president of IRSA, Argentina's only quoted real estate company.

"We were able to buy three properties with cash at a very good price," he says. "It was a very good year for consolidating."

Not that IRSA, which has 19 per cent of its portfolio in development property, was untouched by the 1994 currency crisis. After the early 1990s, a period so flourishing that there were worries that Buenos Aires' distinctive skyline would be altered beyond repair, the development market died. It was only income from rental properties - which account for 52 per cent of IRSA's portfolio - that maintained the company's 1995 profits at \$21m, a level similar to 1995. Earnings per share, however, dropped 15 per cent to \$1.87 per Global Depository Receipt and net sales fell 40 per cent to \$35.3m.

"In emerging countries you have to be twice as financially conservative," Mr Mindlin says. "The environ-

ment changes from night to day." Hence the company's insistence on maintaining a balance between development and rental properties. "We are in a very good position to take advantage of the transformation in the economy over the past six months - the room for the business to develop is immense," he says.

Buenos Aires has some of the cheapest real estate in the world. Purchase prices for prime office space average out at \$2,600 a square metre, compared with \$3,000 in São Paulo and \$8,355 in developed cities such as New York or Paris. Yields can go as high as 13 per cent, against the 6 per cent in Europe and North America.

IRSA has 45 per cent of its \$217m property portfolio in office space, and has a policy of renting to blue-chip tenants. It owns 15 properties in Argentina, including flagships such as the Pirelli and Libertador buildings, and has occupancy rates of 97 per cent.

The remainder of its portfolio is split 50-50 between retail and residential, in a country where the average length of a mortgage is seven years and mortgages

amount to only 2 per cent of GDP (against 5 per cent in Mexico and 19 per cent in the UK). Mr Mindlin believes the potential for residential growth is significant.

"Economic stability is making the banks more willing to give credit," he says, while the privatisation of the pension funds should help grow the market in mortgage securitisation. Argentina's pension funds currently have assets of about \$5bn, or 2 per cent of GDP, compared with 35 per cent of GDP in Chile.

IRSA's flagship residential development is Abril, an 810 hectare estate just outside Buenos Aires that it is developing in partnership with Alto Palermo, the real estate subsidiary of oil conglomerate Perez Companac. The planned development includes sports facilities, shops and a school as well as houses, and the first sales are expected to come through towards the end of fiscal 1997.

On the retail side, it is concentrating on supermarkets and shopping centres, although developments such as Mercado de Abasto in Buenos Aires, in which IRSA

holds a 31 per cent stake, are a combination of residential, retail and leisure.

The company's high levels of cash reserves both act as a cushion and help it to take advantage of cheap opportunities. At the end of June, IRSA had \$73.7m in cash, 23 per cent of its assets, and it aims to make further acquisitions. Analysts believe the company could increase its leverage, but remain cautious. "It is a very shrewd management team that has made the right investment decisions, but I would be wary if they increased their debt further," said one. "It is a very opportunistic company."

Outside Argentina, IRSA has operations in Brazil and Venezuela, both with local partners - a crucial element. "Real estate needs local expertise," says Mr Mindlin. "We want to repeat our strategy in other countries, taking advantage of a sector with big potential in a growing economy with a lack of competition," he says. Hence a reluctance to move into Chile, where the real estate market is already well developed and competitive.

Clare Gascoigne

## COMPANIES AND FINANCE: ASIA-PACIFIC

## Malaysian Mining quits Bakun team

By James Kyngie  
in Kuala Lumpur

Malaysian Mining Corp, the country's leading mining company, has pulled out of the consortium set up to operate the Bakun hydro-electric dam.

Analysts say the move reflects growing concern over the financing of south-east Asia's biggest infrastructure project, which will cost M\$13.6bn (US\$5.4bn) to build.

Mr Anwar Ibrahim, the deputy prime minister and

finance minister, said yesterday that Malaysian Mining had reversed an earlier decision to take a 5 per cent stake in Bakun Hydro-electric Corp, the company which will operate the dam. He said the mining group felt it would not have enough say in the management of the project.

Industry analysts, however, say the decision also reflects widespread concern in Malaysia that Bakun Hydro-electric Corp's planned initial public offering may be undersubscribed.

Bakun is being listed under special guidelines which allow infrastructure projects without current earnings to raise equity finance.

Bakun is not expected to make operating earnings until 2002 or 2003, when it starts to produce electricity. For some investors - especially foreigners, who have been allocated a 10 per cent share of Bakun's equity - this wait is too long. Many also feel that risk associated with the project, which will require the laying of the

world's longest undersea cable, is too great.

The government investment arm, Khazanah Nasional, has agreed to take over Malaysian Mining's proposed 5 per cent stake, Mr Anwar said. He added that any company interested in taking the 5 per cent stake from Khazanah could negotiate with the finance ministry.

Mr Ting Pek Khing, executive chairman of Ekran, the company managing the dam's construction, has said he wants Bakun Hydro-

electric Corp's IPO to take place at the end of this year, or the beginning of next.

Apart from the 10 per cent foreign investor allocation, some 15 per cent of the shares are being reserved for local investors, with the remainder going to Ekran and various government organisations or government-linked companies.

The main contractor in construction of the dam is ABB Asea Brown Boveri, the Swiss-Swedish engineering group.

## CME to press on with Taiwan futures

By Laura Tyson in Taipei

The Chicago Mercantile Exchange has set a date of January 8 for the start of trading in Taiwan index futures, in spite of pleas by Taiwan regulatory authorities to delay the launch.

The CME has obtained US regulatory approval to list Dow Jones Taiwan Stock Index futures and options. The contracts are based on an index of 117 of the largest and most liquid stocks on the Taiwan Stock Exchange.

They will trade exclusively on the Globex after-hours electronic trading system, set up by the CME in partnership with Reuters Holdings and the Marché à Terme International de France (Matif).

As the trading hours of Globex coincide with those of the Taiwan Stock Exchange, Taiwan regulators are concerned that CME trade could negatively affect domestic share price movements.

"We asked them if they could wait until our domestic futures market was set up and then we both could start trading at the same time, but it seems they want to go ahead," an official at Taiwan's Securities and Exchange Commission said yesterday.

The official said preparations were under way for the establishment of a domestic futures exchange, but the timing depended on when the Legislative Yuan, Taiwan's national legislature, passed a futures trading law.

The CME offered to delay trading the products until January 15 if the Taiwan Stock Exchange signed an information-sharing agreement, but no accord was signed.

"We've talked in the past about using the after-hours system as an incubator for new products," the CME said, adding the contracts may be made in open outcry if there is enough interest on Globex.

## ASIA-PACIFIC NEWS DIGEST

## TNT to sell Union Shipping interest

TNT, the Australian transportation group being acquired by the Netherlands' KPN group for A\$2bn (US\$1.62bn), is to sell its 50 per cent interest in the Union Shipping business to New Zealand's Brerley Investments, which holds the other half-interest. No price was disclosed.

Union Shipping runs ship-owning, management and agency services in New Zealand and Australia. The New Zealand-based operations are concentrated on trans-Tasman bulk and liner services, while the Australian business takes in a half-share in Coastal ExpressLine, which operates a three-vessel service between Melbourne and Sydney and Tasmania. Union operates four ships, and incurred a small loss in 1995-96, according to TNT's earnings statement, but had been marginally profitable in the previous two years.

Nikki Tait, Sydney

## Payout at George Weston

Shares in George Weston, the Australian foods manufacturer controlled by Associated British Foods, jumped 25 cents to A\$9 yesterday after it announced it would pay a special one-off dividend worth A\$1 a share. The company told shareholders at its annual meeting that the payment was in acknowledgment of the recent improvement in profits and sales, but should not be anticipated as a regular event.

The company posted an after-tax profit of A\$54.1m (US\$44.1m) in 1995-96, on sales 13.3 per cent higher at A\$1.28bn. It also said trading in the first three months of 1996-97 was in line with expectations.

Nikki Tait

## China group to raise HK\$1bn

China Resources Enterprise, the mainland-owned conglomerate, is raising some HK\$1bn (US\$129.3m) through a share placement to help fund its proposed acquisition of a stake in Hutchison International Terminals, the ports company. According to underwriters, China Resources Enterprise is to place 91m shares at HK\$11.25 each, cashing in on Hong Kong's buoyant stock market, which last week reached a record high.

The funds will help acquire the 10 per cent stake in HIT now held by the parent company, China Resources Holdings, which is being sold for US\$450m. China Resources Enterprise will finance the balance with a bridging loan of \$150m, and also plans a second placement later, underwriters said.

The deal is the second cash-raising exercise by the company, which has been one of Hong Kong's fastest growing "red chips", or China plays, in recent months. Last month it spun off its China property division in a separate listing. China Resources is an arm of China's ministry of foreign trade and economic co-operation.

Louise Lucas, Hong Kong

## LG Chemical in India buy

LG Chemical, of South Korea, a unit of the LG conglomerate, said yesterday it had bought Hindustan Polymers of India for \$36m, as part of its expansion efforts in Asia.

Hindustan Polymer makes 40,000 tons of polystyrene, 10,000 tons of expanded polystyrene insulation and 20,000 tons of styrene monomer a year. LG Chemical is also considering plans to construct another polystyrene plant in the country.

AFX News, Seoul

## China to open up A-shares to foreigners

By John Fiddling  
in Hong Kong and Sophie  
Roel in Beijing

China plans to open its domestic A-share market to a limited number of foreign fund management companies next year, according to a senior official at the People's Bank of China.

However, Mr Chen Yuan, deputy governor of the Chinese central bank, said that the proposed pilot scheme did not signal the market of the A-share market, which is reserved for foreign investors.

"We are talking about having very few joint-venture fund management companies participate in the pilot scheme," said Mr Chen, speaking after a conference in Hong Kong. "Foreign fund managers can raise funds from the domestic markets and invest in A-shares. The foreign partner would do technology transfers," he said.



China has been reluctant to allow foreign investment in the A-share market, fearing instability caused by rapid inflows and outflows of foreign capital.

At the same time, however, it is thought that foreign fund management might dampen speculation in the A-share market by promoting longer-term, institutional investment. The A-share market is still dominated by retail investors, which has contributed to volatility.

Mr Chen also said yesterday that China would grant licences soon for foreign banks to conduct local currency business in Shanghai. A statement was expected in days rather than weeks, he said.

Mr Chen did not say how many licences would be granted, but the Shanghai Star newspaper named three successful candidates - Citibank, the Hong Kong and Shanghai Banking Corp, and Tokyo-Mitsubishi Bank.

companies have urged an end to the separation of A-share and B-share markets, arguing the B-share markets in Shanghai and Shenzhen have suffered from a lack of liquidity.

Last month, Mr Philip Tsao, chairman of Peregrine Investment Holdings, the Hong Kong-based merchant bank, called for a merger of the A-share and B-share markets. He said controls on

foreign ownership could be achieved by investment limits, as in other markets.

An obstacle to a market merger is currency convertibility. While the yuan has been convertible on the current account since the beginning of this month, full convertibility appears a long way off. Without this it is unclear how foreign funds could be exchanged for yuan to invest in A-shares.

## Sanyo moves into long-distance telecoms

By Michio Nakamoto  
in Tokyo

Sanyo, the consumer electronics company, has unveiled plans to enter Japan's increasingly competitive long-distance telecoms market.

The move follows deregulation in the autumn, which opened the market to competition from

companies outside the telecoms industry.

Sanyo said that from January it would use its domestic leased-line network to offer long-distance telecoms services at rates 30 per cent lower than those charged by NTT, the dominant domestic operator.

Deregulation put in place in October allowed companies which lease private lines from telecoms

operators to connect both ends of their leased lines to the public network.

Sanyo's initiative follows announcements that Matsushita, Japan's largest consumer electronics company, and Mitsubishi Electric also plan to offer telecoms services next year using their leased lines.

Following deregulation of the domestic leased-line market, the

ministry of posts and telecommunications is expected next year to allow leased lines in the international market to be connected to the public network at both ends.

The move should spur competition in the international market. The cost of calling to another country is substantially higher in Japan than in other industrialised countries.

## Fortis raises forecast

## Key figures Fortis AG and Fortis AMEV first three quarters

	Fortis AG (in BEF)			Fortis AMEV (in NLG)		
	1996	1995	in %	1996	1995	in %
Net earnings per share	266	231	15	3.33	2.89	15
Equity per share	2,715	2,238	21	37.43	31.89	17

\* Based 1996.  
\*\* 1995 adjusted to reflect changes in capital.  
\*\*\* Figures after the Fortis AMEV share split in June 1996.

## Key figures Fortis first three quarters

(in ECU million)	1996	1995	Increase in %
Total income	13,790	12,693	9
Operating result	863	742	16
Net profit	554	469	18
Net equity	5,474	4,776	15
Total assets	127,143	125,486	1

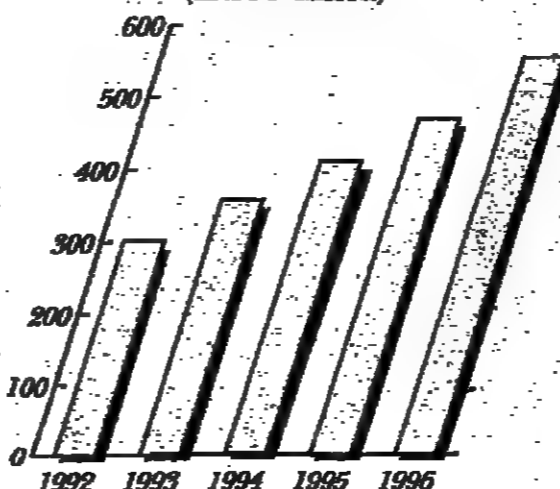
\* Based 1996.

## Prospects

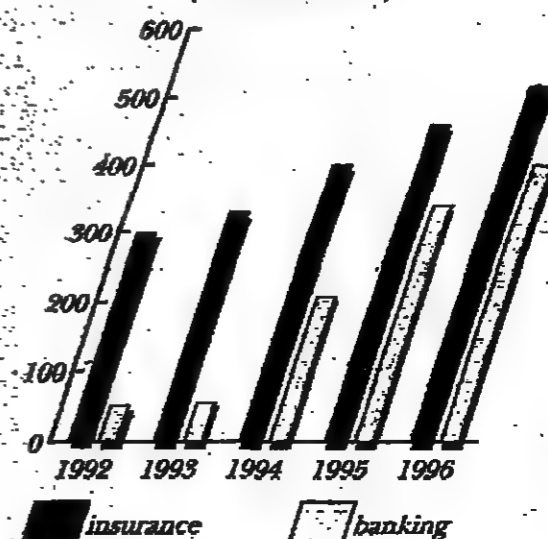
In view of the fine results, Fortis is raising its forecast: barring unforeseen circumstances and sharp fluctuations in exchange rates it is expecting an increase of between 12 and 15% in its net profit for the whole of 1996.

The two parent companies of Fortis also raise their forecast. They are expecting an increase of at least 10% in earnings per share for 1996 as a whole.

## Net profit Fortis first three quarters 1992 - 1996 (in ECU million)



## Operating result Fortis first three quarters 1992 - 1996 (in ECU million)



## Information

A copy of the three quarter results report of Fortis and its two parent companies can be obtained by contacting Fortis Group Communication.

Fortis  
Boulevard Emile Jacqmain 53  
1000 Brussels  
Belgium  
Tel.: 32 (0)2 220 93 49  
Fax: 32 (0)2 220 80 92

Fortis  
Archimedeslaan 6  
3584 BA Utrecht  
the Netherlands  
Tel.: 31 (0)30 257 65 48  
Fax: 31 (0)30 257 78 38

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September 1995



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Kenneth A. Loplan (212) 815-2084 in New York, or  
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## COMPANIES AND FINANCE: THE AMERICAS

Four Seasons joins  
Carlson in hotel dealBy Bernard Simon  
in Toronto

Four Seasons, the Toronto-based luxury hotel operator, has formed a partnership with Carlson Hospitality Worldwide, the privately-held US travel, hotel and restaurant group, to expand the Regent International hotel chain.

Regent's nine existing properties include some of the Pacific Rim's best-known hotels, such as those in Hong Kong, Sydney and Singapore. Carlson intends to double the size of the chain over the next two to three years.

Regent is wholly-owned by Four Seasons but has a separate management team, based in Hong Kong.

The deal with Carlson is designed to marry the Regent brand name and Four Seasons' expertise in luxury hotel management, with the Minneapolis-based group's franchising and marketing muscle.

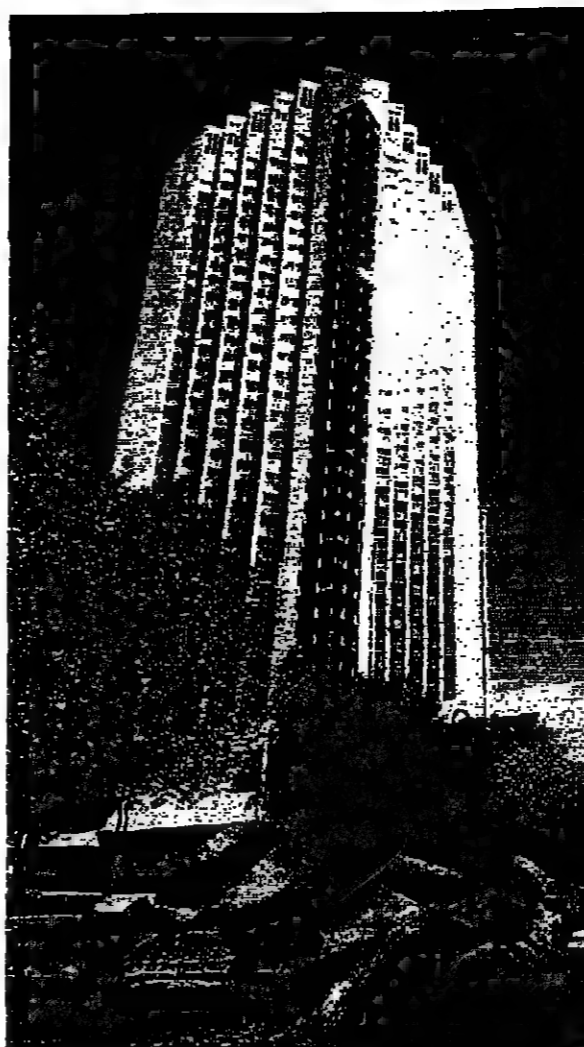
Four Seasons said it was attracted by Carlson's wide access to sources of capital to develop new hotels. Carlson's other interests include the international Radisson Hotel chain, which is run largely by franchisees.

Carlson's extensive travel agent network, comprising 4,000 outlets in 125 countries, will also be used to promote Regent hotels.

Under the deal, Four Seasons will retain the management contracts for the existing Regent chain until they expire.

Carlson will set up a wholly-owned subsidiary to franchise new Regent properties. Four Seasons will share in the franchise fees, but will have no ownership interest or financial exposure to these hotels' operations.

Separately however, Four Seasons will be free to sign management contracts with new Regent hotels, sharing its fee income with Carlson. Mr Doug Ludwig, Four Seasons' chief financial officer,



The Regent Hotel in Sydney

said yesterday that "we'll both be motivated to source growth opportunities for Regent on both the franchise and management fronts".

The Canadian group, which retains ownership of the Regent brand name, aims to exert a measure of control over the enlarged chain through a detailed code of physical and operations standards, to be compiled in co-operation with Carlson. "We are explicitly responsible for contributing to that process," Mr Ludwig said.

Four Seasons, a listed company controlled by its founder, Mr Isadore Sharp, has been seeking ways to extend its reach with limited financial resources.

Prince al-Waleed bin Talal Abdullah, the Saudi Arabian investor, bought a 28 per cent stake in 1994, and has become an active participant in the chain's expansion. Four Seasons is due to open three hotels of its own within the next year, in Indonesia, California and Goa, India.

## AMERICAS NEWS DIGEST

Loctite struggle  
reaches deadline

The transatlantic struggle for control of Loctite, the US adhesives and sealants company, is due to come to a head later today with a deadline set for the submission of bids for the company.

The passing of the deadline, fixed for this afternoon in New York, should reveal whether the company has attracted any potential buyers other than Henkel, the German chemicals company which is already its largest shareholder. It was Henkel's \$1.2bn bid for the 85 per cent of Loctite that it does not already own that prompted the auction procedure now under way at the US company.

In spite of a report yesterday that Loctite was in discussions with another, unnamed bidder, it remained unclear whether the company would receive any rival bids by today's deadline. For its part, Henkel said at the weekend that it had yet to decide whether to submit a formal offer of its own under the rules set out by the US company.

If it does not, the German company could decide either to increase or leave in place its existing tender offer for the company, which is due to expire on January 6, one person close to the company said. Alternatively, it could opt to sell its shares to another, higher bidder - though Henkel has said that its approach to Loctite was not intended as part of an exit strategy.

Even if Loctite manages to attract a rival offer, it may find it difficult to repel Henkel's advances. The German company stands to reap greater cost savings from a merger than many other potential buyers - a consideration which in part accounts for the US company's complaint that Henkel has not offered to pay a high enough price for the acquisition.

Also, with 35 per cent of Loctite's stock already in its control, Henkel would need acceptance from holders of only a fifth of the remaining shares to win control.

Richard Waters, New York

## Go-ahead for Manitoba sale

The government of Manitoba, one of Canada's prairie provinces, is going ahead with the C\$950m (US\$702m) privatisation of Manitoba Telephone System and an initial public offering of 70m shares.

The underwriters, RBC Dominion Securities and CIBC Wood Gundy Securities, said the final price would be set by December 20 but would not be higher than C\$13.50 a share. Priority will be given to Manitoban residents, who can pay a first instalment of C\$7 and the balance in January 1998.

The offer is expected to close early in January and the shares will trade in Toronto, Montreal and Winnipeg.

No single investor will be allowed to own more than 10 per cent of the MTS shares and if the issue is over-subscribed the issue will be pro-rated.

MTS earned C\$15.1m on revenues of C\$540m in 1995, and C\$13.3m in the first nine months of 1996, against C\$11m a year earlier. MTS will use C\$400m of the IPO proceeds to reduce debt and the Manitoba government, as previous owner, will receive about C\$95m.

If the debt had already been reduced, MTS estimates the latest nine months would have shown a profit of C\$55.5m.

Robert Gibbons, Montreal

## Technical obstacle to US telecoms link

By Richard Waters  
in New York

Technical difficulties in linking together the US's long distance and local telephone networks are likely to delay the arrival of full competition in the country's \$100bn local telephone business, a senior executive of AT&T, the biggest long-distance carrier, said this week.

The warning from Mr John Ziegler, AT&T general counsel, comes as state-by-state arbitration hearings are drawing to a close over the commercial terms on which rival telephone companies will eventually link their systems. Evidence from these arbitrations suggests that newcomers will be able

to compete profitably for a share of local call business, Mr Ziegler and other telephone company executives said.

Speaking at a conference organised in New York by Salomon Brothers, Mr Ziegler said of the arrival of local competition: "It's probably going to be longer than a lot of people are predicting."

Uncertainty over deregulation has already cast a cloud over the process this autumn, with a Federal court blocking the nationwide pricing rules developed by the Federal Communications Commission in preference for state-by-state negotiations.

According to Mr Ziegler, though, technical obstacles to competition present a big-

ger problem than regulation. Developing and implementing the software which will make it possible for competitors to buy capacity from local telephone companies and resell it to their own customers was proving time-consuming, making it "extraordinarily difficult getting the [local] exchanges open," he said.

AT&T has been testing a resale arrangement such as this for the past eight months in California, yet is still encountering problems with between a quarter and a third of the 800 test sites, Mr Ziegler said. The AT&T executive called 1997 "the year we have to learn how to do systems that work on a massive scale".

Speaking at the same con-

ference, Mr Nate Davis, senior vice-president in charge of local markets at MCI, said of the job of linking local and long-distance networks: "It will be a painful and slow process."

In spite of these warnings, long-distance companies look better placed for local competition than had seemed likely earlier this autumn.

The failure of the FCC to impose national pricing rules had been expected to lead to less attractive pricing terms for newcomers to the local markets, who will largely rely on resale arrangements to provide competition.

That has not been the case so far, said Mr Ziegler. AT&T has completed 27 state-level

arbitration procedures covering some of the biggest states, including California, Texas, New York and Ohio. Of these, 24 had resulted in discount rates for telephone resellers of between 17-25 per cent, the same range that had been recommended by the FCC, Mr Ziegler said.

Also, in 23 cases, the state hearings had resulted in the use of so-called forward-looking costing as a basis for assessing how much new competitors should pay for using individual elements of a local telephone company's network, such as its switches.

This is the costing system that had been proposed by the FCC, and which has been heavily criticised by the local companies.

Barrick pursues  
talks on BusangBy Bernard Simon  
in Toronto

Talks aimed at turning control of Indonesia's vast Busang gold deposit over to Toronto-based Barrick Gold may continue beyond today's deadline set by the Indonesian government.

Representatives of Barrick and Bre-X Minerals, the small exploration company that currently controls the licence to the property, were due to meet in Jakarta today in an effort to resolve remaining issues.

However, participants were preparing contingency plans in case agreement was not reached by the deadline. The government indicated earlier that if Bre-X and Barrick failed to conclude a deal by today, it would take unspecified "necessary steps" to prevent further delays in developing the deposit.

Barrick yesterday dismissed moves by Placer Dome, the Vancouver-based mining group, to derail the proposed deal with Bre-X. "Barrick and Bre-X are negotiating in good faith," Barrick said.

Busang, located in East Kalimantan, has reserves presently estimated at 47m ounces, and possibly as high as 100m ounces. It is expected to be developed into one of the world's biggest gold mines, with production starting around the turn of the century.

Under the Indonesian pro-

posal, Barrick would acquire 75 per cent of Bre-X's stake, which includes a 90 per cent interest in the richest of three zones on the property. The government has asked for a 10 per cent stake.

Placer's strategy is to position itself as an alternative should talks between Barrick and Bre-X collapse. It revealed earlier this week that, prior to the government's involvement, it had discussed a conditional offer with Bre-X at a price "well in excess" of Bre-X's current share price, which values its stake in Busang at C\$4.2bn (US\$3.1bn).

"We were very disappointed to see the auction process pre-empted," Mr John Willson, Placer's chief executive, said.

Placer has told the Indonesian authorities, including President Suharto, that it is willing to make a "competitive" bid for a substantial interest in Busang.

The government's intervention on Barrick's behalf has created a stir among foreign investors in Indonesia. The authorities in Jakarta were said to be concerned that legal disputes over the ownership of Busang were delaying mine construction.

Under Indonesian law, title to the resource rests with the government. Bre-X holds an exploration licence, and is currently waiting to receive a "contract of work" that would allow it to proceed with mine construction.



Munder UK LLC, a subsidiary of Munder Capital Management, has acquired an equity interest in

**framlington**

The undersigned initiated this transaction, acted as financial advisor to Framlington Holdings Limited and assisted in the negotiations.

**BERKSHIRE CAPITAL CORPORATION**

October 1996

Italian Lire 100,000,000,000



Credito per le imprese e le Opere  
Pubbliche Società per Azioni

Floating Rate Notes Due 2001

In accordance with the provisions of the Notes, notice is hereby given that for the Interest Period from November 22, 1996 to May 22, 1997 the Notes will carry an interest rate of 6.74% per annum. The amount of interest payable on May 22, 1997 will be Italian Lire 33,224,656 per Italian Lire 1,000,000,000 principal amount of Notes.

By: The Chase Manhattan Bank  
London, Agent Bank



December 4, 1996

SGA SOCIETE GENERALE

ACCEPTANCE N.Y.  
FRF 500 000 000 REVERSE  
FLOATING RATE NOTES  
DUE DECEMBER 2002

For the period November 02,  
1996 to March 03, 1997  
the new rate has been fixed  
at 9.375 % p.a.

Next payment date:  
March 03, 1997

Amount:  
FRF 3,365,791 for the  
denomination of FRF 100 000

FRF 23 697,92 for the  
denomination of FRF 1 000 000

THE PRINCIPAL PAYING AGENT  
SOCIETE GENERALE  
BANK & TRUST LUXEMBOURG

ABBEY NATIONAL

TREASURY SERVICES

PLC

FRF 1,000,000,000  
Guaranteed Ten 10  
Indexed Floating Rate  
Notes due 2006

Notice is hereby given that the rate of interest for the period from 4 December 1996 to 4 March 1997 has been fixed at 4.88 per cent per annum. The coupon amounts due for this period are FRF 117.25 per denomination of FRF 10,000 and FRF 1,172.50 per denomination of FRF 100,000 and are payable on the interest payment date 4 March 1997.

The Fiscal Agent  
BNP

BNP  
Luxembourg SA

EUROFIMA

European Company for the Finance  
of Railroad Rolling Stock

U.S. \$250,000,000

Deutsche Mark LIBOR Based  
Floating Rate Notes Due 2002

For the Interest Period 3rd  
December, 1996 to 3rd  
March, 1997 the Notes  
will carry an interest rate  
of 5.375% per annum with  
Coupon Amounts of U.S.  
\$13.44, U.S. \$134.38 and  
U.S. \$18,407.50 per U.S.  
\$1,000, U.S. \$10,000 and  
U.S. \$1,000,000 Notes  
respectively. The relevant  
Interest Payment Date will  
be 3rd March, 1997.

Swiss Bank Corporation

EUROPEAN COAL AND

STEEL COMMUNITY

GBP 52,700,000  
Floating Rate Notes  
DUE 1997

For the period November 29,  
1996 to May 30, 1997 the new  
rate has been fixed at  
6.05938 % p.a.

Next payment date:  
May 30, 1997

Coupon rate: 10

Amount:  
GBP 30.21 for the  
denomination of GBP 1 000

GBP 302.14 for the  
denomination of GBP 10 000

THE PRINCIPAL PAYING AGENT  
SOCIETE GENERALE  
BANK & TRUST LUXEMBOURG



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## CURRENCIES AND MONEY

## D-Mark and pound fall as dollar rallies

By Graham Bowley

The dollar rallied strongly on the foreign exchanges yesterday as investors fled the D-Mark over concerns that European authorities were seeking to undermine the German currency.

The dollar surged in Asian trading after German officials' comments on Monday suggested they expected the euro, the proposed European single currency, would be weaker than the dollar and, at least until the future European central bank established its credibility.

The US currency's rally continued in European trading. It rose against the yen and touched a 23-month high against the D-Mark.

Traders said the officials might be trying to talk up the dollar in order to weaken the French franc, thus stimulating the French economy.

The pound, which rose in line with the dollar in Asian

trading, fell sharply once London trading opened amid rumours that the Bank of England was intervening to limit sterling's appreciation.

The pound closed in London at 1.6287, but this was about six pence down on its peak reached in overnight Asian trading.

The pound finished three cents lower against the dollar at \$1.652. The dollar closed in London at DM1.5685, against DM1.542. It was unchanged against the yen at ¥113.7.

The dollar rose sharply after London's close on Monday as the currency markets digested comments made by Mr Otmars Issing, Bundes-

bank chief economist, and Mr Hans Tietmeyer, Bundesbank president.

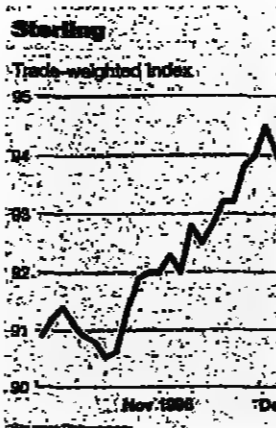
Traders said Mr Issing's comments were taken to mean that he would be content with a stronger dollar.

Mr Tietmeyer suggested that it would be some time after the start of 1997 before the European central bank established its full anti-inflation credentials.

Mr Robert Roberts, strategist at NatWest Markets in London, said: "This is the first time that anyone so senior has been so explicit on this subject, suggesting that the Euro could lead to a flight to quality."

This caused traders to question the euro's potential status as a reserve currency, and triggered a sell-off of the D-Mark against the dollar.

"The cynics would say that the German authorities have chosen this route of talking the dollar higher instead of changing interest rates," said Mr Roberts. Pressure has been rising



In France the French and German authorities to weaken the franc, particularly against the dollar.

The D-Mark was further undermined by weak German industrial production data which indicated that German interest rates look set to remain low.

The pound also fell victim to yesterday's market turbulence. Its reversal came as

little surprise to traders, as sterling had appreciated by 12 per cent since the summer. Many had expected profit-taking to reverse some of the gains sooner or later.

Mr Jim O'Neill, at Goldman Sachs in London, said: "There has been rampant profit taking. The last 24 hours has seen heavy selling of the D-Mark for the yen, prompting big profit taking in yen-driven trades." This hit sterling as Japanese investors have been buying both pounds and Aussie dollars.

The pound has been rising on expectations of interest rate hikes. After last month's budget, which traders said was more fiscally expansive than Mr Kenneth

Clarke, the chancellor, claimed, speculation grew that interest rates might be raised at this month's meeting between Mr Clarke and Mr Eddie George, governor of the Bank of England.

But traders said yesterday that the markets were starting to believe that the Budget was fiscally tighter than initially suspected, so putting off the need for rate hikes. Traders said investors had also started to doubt whether the pound's rally could go much further after the purchasing managers survey of manufacturers this week showed that exports were beginning to suffer.

Mr O'Neill said: "It is tough to see any real fresh buying of sterling by investors at these levels." But he added: "If base rates rise next week, sterling could recover sharply."

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## POUND SPOT FORWARD AGAINST THE POUND

Dec 3	Closing mid-point	Change on day	Dec 3	Closing mid-point	Change on day
Belgium	18.2098	-0.0748	215	18.4910	18.1878
Austria	18.2098	-0.0748	215	18.4910	18.1878
Denmark	18.2098	-0.0748	215	18.4910	18.1878
France	18.2098	-0.0748	215	18.4910	18.1878
Germany	18.2098	-0.0748	215	18.4910	18.1878
Greece	18.2098	-0.0748	215	18.4910	18.1878
Italy	18.2098	-0.0748	215	18.4910	18.1878
Netherlands	18.2098	-0.0748	215	18.4910	18.1878
Norway	18.2098	-0.0748	215	18.4910	18.1878
Portugal	18.2098	-0.0748	215	18.4910	18.1878
Spain	18.2098	-0.0748	215	18.4910	18.1878
Sweden	18.2098	-0.0748	215	18.4910	18.1878
Switzerland	18.2098	-0.0748	215	18.4910	18.1878
UK	18.2098	-0.0748	215	18.4910	18.1878
US	18.2098	-0.0748	215	18.4910	18.1878
Japan	18.2098	-0.0748	215	18.4910	18.1878
South Africa	18.2098	-0.0748	215	18.4910	18.1878
South Korea	18.2098	-0.0748	215	18.4910	18.1878
Taiwan	18.2098	-0.0748	215	18.4910	18.1878
Thailand	18.2098	-0.0748	215	18.4910	18.1878
Malaysia	18.2098	-0.0748	215	18.4910	18.1878
Indonesia	18.2098	-0.0748	215	18.4910	18.1878
Philippines	18.2098	-0.0748	215	18.4910	18.1878
Singapore	18.2098	-0.0748	215	18.4910	18.1878
India	18.2098	-0.0748	215	18.4910	18.1878
China	18.2098	-0.0748	215	18.4910	18.1878
Hong Kong	18.2098	-0.0748	215	18.4910	18.1878
Japan	18.2098	-0.0748	215	18.4910	18.1878
South Korea	18.2098	-0.0748	215	18.4910	18.1878
Taiwan	18.2098	-0.0748	215	18.4910	18.1878
Thailand	18.2098	-0.0748	215	18.4910	18.1878
Malaysia	18.2098	-0.0748	215	18.4910	18.1878
Indonesia	18.2098	-0.0748	215	18.4910	18.1878
Philippines	18.2098	-0.0748	215	18.4910	18.1878
Singapore	18.2098	-0.0748	215	18.4910	18.1878
India	18.2098	-0.0748	215	18.4910	18.1878
China	18.2098	-0.0748	215	18.4910	18.1878
Hong Kong	18.2098	-0.0748	215	18.4910	18.1878

1 Rates for Dec 3. Dollar rates in the Pound Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. Sterling rates calculated by the Bank of England. Base rate 10.25. Bank of England. Dec 3. Other rates and forward rates in the Dollar Spot table are calculated from the Bank of England's Sterling Spot Rates. Some rates are marked by the FT.

## DOLLAR SPOT FORWARD AGAINST THE DOLLAR

Dec 3	Closing mid-point	Change on day	Dec 3	Closing mid-point	Change on day
Belgium	11.0228	-0.0008	100	11.0228	-0.0008
Austria	11.0228	-0.0008	100	11.0228	-0.0008
Denmark	11.0228	-0.0008	100	11.0228	-0.0008
France	11.0228	-0.0008	100	11.0228	-0.0008
Germany	11.0228	-0.0008	100	11.0228	-0.0008
Greece	11.0228	-0.0008	100	11.0228	-0.0008
Italy	11.0228	-0.0008	100	11.0228	-0.0008
Netherlands	11.0228	-0.0008	100	11.0228	-0.0008
Norway	11.0228	-0.0008	100	11.0228	-0.0008
Portugal	11.0228	-0.0008	100	11.0228	-0.0008
Spain	11.0228	-0.0008	100	11.0228	-0.0008
Sweden	11.0228	-0.0008	100	11.0228	-0.0008
Switzerland	11.0228	-0.0008	100	11.0228	-0.0008
UK	11.0228	-0.0008	100	11.0228	-0.0008
US	11.0228	-0.0008	100	11.0228	-0.0008
Japan	11.0228	-0.0008	100	11.0228	-0.0008
South Africa	11.0228	-0.0008	100	11.0228	-0.0008
South Korea	11.0228	-0.0008	100	11.0228	-0.0008
Taiwan	11.0228	-0.0008	100	11.0228	-0.0008
Thailand	11.0228	-0.0008	100	11.0228	-0.0008
Malaysia	11.0228	-0.0008	100	11.0228	-0.0008
Indonesia	11.0228	-0.0008	100	11.0228	-0.0008
Philippines	11.0228	-0.0008	100	11.0228	-0.0008
Singapore	11.0228	-0.0008	100	11.0228	-0.0008
India	11.0228	-0.0008	100	11.0228	-0.0008
China	11.0228	-0.0008	100	11.0228	-0.0008
Hong Kong	11.0228	-0.0008	100	11.0228	-0.0008
Japan	11.0228	-0.0008	100	11.0228	-0.0008
South Korea	11.0228	-0.0008	100	11.0228	-0.0008
Taiwan	11.0228	-0.0008	100	11.0228	-0.0008
Thailand	11.0228	-0.0008	100	11.0228	-0.0008
Malaysia	11.0228	-0.0008	100	11.0228	-0.0008
Indonesia	11.0228	-0.0008	100	11.0228	-0.0008
Philippines	11.0228	-0.0008	100	11.0228	-0.0008
Singapore	11.0228	-0.0008	100	11.0228	-0.0008
India	11.0228	-0.0008	100	11.0228	-0.0008
China	11.0228	-0.0008	100	11.0228	-0.0008
Hong Kong	11.0228	-0.0008	100	11.0228	-0.0008

1 Rates for Dec 3. Dollar rates in the Dollar Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. Sterling rates calculated by the Bank of England. Base rate 10.25. Bank of England. Dec 3. Other rates and forward rates in the Dollar Spot table are calculated from the Bank of England's Sterling Spot Rates. Some rates are marked by the FT.

## CROSS RATES AND DERIVATIVES

Dec 3	Dec 3	Dec 3	Dec 3	Dec 3	Dec 3
Belgium	18.2098	18.4910	18.1878	18.2098	18.4910
Austria	18.2098	18.4910	18.1878	18.2098	18.4910
Denmark	18.2098	18.4910	18.1878	18.2098	18.4910
France	18.2098	18.4910	18.1878	18.2098	18.4910
Germany	18.2098	18.4910	18.1878	18.2098	18.4910
Greece	18.2098	18.4910	18.1878	18.2098	18.4910
Italy	18.2098	18.4910	18.1878	18.2098	18.4910
Netherlands	18.2098	18.4910	18.1878	18.2098	18.4910
Norway	18.2098	18.4910	18.1878	18.2098	18.4910
Portugal	18.2098	18.4910	18.1878	18.2098	18.4910
Spain	18.2098	18.4910	18.1878	18.2098	18.4910
Sweden	18.2098	18.4910	18.1878	18.2098	18.4910
Switzerland	18.2098	18.4910	18.1878	18.2098	18.4910
UK	18.2098	18.4910	18.1878	18.2098	18.4910
US	18.2098	18.4910	18.1878	18.2098	18.4910
Japan	18.2098	18.4910	18.1878	18.2098	18.4910
South Africa	18.2098	18.4910	18.1878	18.2098	18.4910
South Korea	18.2098	18.4910	18.1878	18.2098	18.4910
Taiwan	18.2098	18.4910	18.1878	18.2098	18.4910
Thailand	18.2098	18.4910	18.1878	18.2098	18.4910
Malaysia	18.2098	18.4910	18.1878	18.2098	18.4910
Indonesia	18.2098	18.4910	18.1878	18.2098	18.4910
Philippines	18.2098	18.4910	18.1878	18.2098	18.4910
Singapore	18.2098	18.4910	18.1878	18.2098	18.4910
India	18.2098	18.4910	18.1878	18.2098	18.4910
China	18.2098	18.4910	18.1878	18.2098	18.4910
Hong Kong	18.2098	18.4910	18.1878	18.2098	18.4910
Japan	18.2098	18.4910	18.1878	18.2098	18.4910
South Korea	18.2098	18.4910	18.1878	18.2098	18.4910
Taiwan	18.2098	18.4910	18.1878	18.2098	18.4910
Thailand	18.2098	18.4910	18.1878	18.2098	18.4910
Malaysia	18.2098	18.4910	18.1878	18.2098	18.4910
Indonesia	18.2098	18.4910	18.1878	18.2098	18.4910
Philippines	18.2098	18.4910	18.1878	18.2098	18.4910
Singapore	18.2098	18.4910	18.1878	18.2098	18.4910
India	18.2098	18.4910	18.1878	18.2098	18.4910
China	18.2098	18.4910	18.1878	18.2098	18.4910
Hong Kong	18.2098	18.4910	18.1878	18.2098	18.4910

1 Rates for Dec 3. Dollar rates in the Dollar Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. Sterling rates calculated by the Bank of England. Base rate 10.25. Bank of England. Dec 3. Other rates and forward rates in the Dollar Spot table are calculated from the Bank of England's Sterling Spot Rates. Some rates are marked by the FT.

## UK INTEREST RATES

Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	3	Dec	
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## COMMODITIES AND AGRICULTURE

## Australia lifts forecast for winter grain harvest

By Nikki Tait in Sydney

Official forecasts for Australia's winter grain production, which already stand at record levels, have been raised again following mild spring weather and good rains.

The Australian Bureau of Agricultural and Resource Economics said yesterday it now expected winter crop production to total 32.2m tonnes, about 4.6m tonnes more than last year, and a 2.2m tonne increase on the previous record harvest of 1985-86.

The bureau's estimates have risen steadily in recent months: in September, for example, it was talking of a

## CBOT wheat futures move lower as evidence of record production mounts

Wheat futures at the Chicago Board of Trade moved lower yesterday as traders continued to assess the impact of rapidly-expanding global grain supplies, writes Laurie Morse.

Fresh evidence of record southern hemisphere grain production weighed on prices, as did news of relatively heavy deliveries against the expiring futures contract.

Having opened at 377.25 cents, wheat futures for March delivery were trading at 372.5 cents a bushel at midday - holding above life-of-contract lows of 363 cents reached on November 6.

On top of the news from Australia, traders said industry estimates of Argentina's wheat harvest had moved up to about 16m tonnes -

nearly double last year's crop of 9.2m, and sharply higher than the last official estimate of 14.5m.

US winter wheat crop prospects are also excellent - conditions in growing regions are the best in five years. The new US crop will not be ready for harvest for five months.

Both Australia and Argentina have been actively contracting their

new crop wheat for export, lending a competitive note to the world wheat trade.

"We have historically tight [wheat] stocks in the US and huge competition in the world market, and I think traders are trying to sort that out," said Mr Randy Mitchell, grains analyst for Merrill Lynch in Chicago.

will be heavily dependent on the level of production to make acceptable returns, and there have been concerns that the rapidly appreciating Australian dollar could affect the ability of the Australian Wheat Board to

## Traders nervous after more copper volatility

## MARKETS REPORT

By Kenneth Gooding and Robert Corzine

After another volatile day for copper on the London Metal Exchange, traders remained nervous and uncertain about the market's direction in the next few days. However, there was less concern about the possibility of market turmoil this morning when dealers must declare whether they want to exercise options.

Copper's rollercoaster ride yesterday started when the LME revealed that its stocks of the metal had risen by 1,000 tonnes when traders had widely expected they would be up by 3,000 tonnes to 5,000 tonnes.

This caused the price to bounce in the morning. It weakened again but then recovered when the premium for copper for immediate delivery compared with three-month metal widened in late trading. This premium started yesterday at

\$185 a tonne, eased to \$150 and ended at \$170. Premiums of this size should attract spare metal to the exchange but the small stock rise convinced many analysts that there was little physical copper available.

Gold in London crashed through the \$370 a troy ounce level yesterday and closed at \$367.25, down \$5.20 from Monday's close. It was the first time that the seemingly solid price support at \$370 had given way since November 1993.

"I would not be surprised to see gold at \$330 in 1997," said Mr Ted Arnold, analyst at the Merrill Lynch financial services group.

Dealers suggested gold was collapsing under the weight of producer selling while potential buyers were standing back because they believed the price had further to fall.

Oil prices yesterday continued to be influenced by announcements from Baghdad about the timing and number of export contracts

signed with foreign companies. The world benchmark Brent Blend for January delivery fell 27 cents from its Monday close to \$23.35 a barrel after an Iraqi official said first shipments could begin next week. But Brent regained ground in late London trading to around \$23.62, as traders once again adopted a "wait and see" attitude toward the impact of Iraqi crude sales.

Traders also watched for signs that the six-day-old strike at three French refineries owned by Elf Aquitaine was affecting western European product markets. Gasoline prices firmed on fears of possible supply shortfalls. Gasol futures on London's IFE closed up \$3 at \$222.75 a tonne.

quality may fall short of expectations. "October rains across much of New South Wales and Queensland have led to downgrading of crops, and the cool, mild conditions are likely to lead to lower than usual protein levels in wheat," said Mr Brian Fisher, the bureau's executive director.

For grain farmers, the record crop is also proving a mixed blessing. The recent sharp fall in world wheat prices has meant that they

## Inco upbeat on trend for nickel

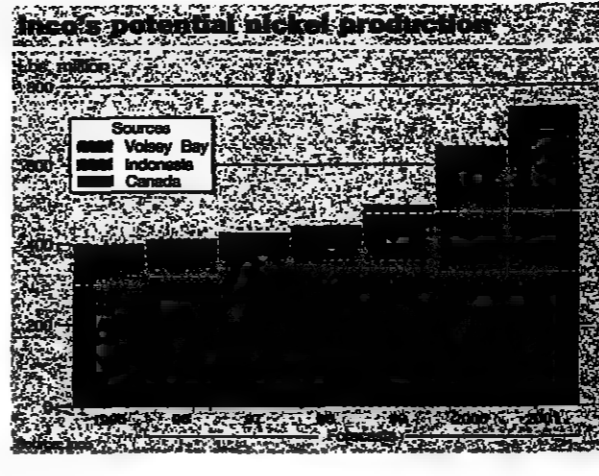
By Bernard Simon in Toronto

Inco, the world's biggest nickel producer, has painted an encouraging picture of market trends, in spite of slackness in the stainless steel industry and the possibility of a sharp increase in nickel output towards the end of the decade.

The Toronto-based company also disclosed in its annual presentation to analysts that the estimated cost of developing the big Voisey's Bay nickel, copper and cobalt deposit in Labrador has climbed from \$1.1bn to US\$1.4bn.

Voisey's Bay, acquired earlier this year, is expected to produce 270m lb of nickel by 2001. The deposit will lift Inco's annual output to an estimated 750m lb, from 450m lb in 1997. It will also double copper output to 500m lb.

Inco, which accounts for about 30 per cent of global nickel output, predicted that Voisey's Bay would lower average cash production costs from \$1.45 in the first nine months of 1996 to



60 cents a pound in 2001. Mr Peter Salathiel, executive vice-president for marketing, said the balance between nickel supply and demand would be "very good" in 1997 and 1998.

He forecast that nickel demand would rise from 980,000 tonnes in 1996 to 1,025,000 tonnes next year, reflecting accelerating expansion in the industrialised economies. He said an improvement was recently evident in Europe.

Mr Salathiel said the stainless steel industry, which makes up about two-thirds of nickel demand, was "going through a bit of a crisis", with weak demand exacerbated by a steady rise in capacity. However, he estimated that stainless steel output would grow from 14.8m tonnes in 1996 to 15.7m tonnes next year.

Nickel supplies are expected to rise from 980,000 tonnes to about 1m tonnes. Few new projects are likely to come on-stream before 1998 and, according to Mr

Salathiel, many projects now on the drawing board may not reach production.

"While there is a lot of nickel in the world, there is a shortage of good deposits," he said. Mr Salathiel also dismissed rumours of large, unreported stocks in Rotterdam warehouses.

Capital spending is expected to climb to about \$740m next year from \$432m in 1996 and \$626m last year. In addition, as part of the Voisey's Bay deal, Inco has pledged to buy back about 60m shares.

## Coffee stocks 'critically low'

By Deborah Hargreaves

The world faces a deficit in the supply of coffee next year of 1.2m bags, or 72,000 tonnes, according to GNI, the London broker.

Mr Lawrence Eagles, commodities analyst at GNI in Brazil, says he believes tight coffee supplies will push prices up towards the end of the year as consumer stocks are "critically low".

He says prices on New York's Coffee, Sugar and Cocoa Exchange could go as high as \$1.30 a pound in coming months, possibly with a spike to \$1.60.

Coffee prices were a little weaker yesterday, with New York March futures contract trading at \$1.05 a pound in light volume.

The market's direction depends on news of Brazil's crop. Estimates of the crop's size differ widely, with the US Department of Agriculture expecting around 27m bags - much higher than local estimates, which put the harvest at between 24m and 26m bags.

Although global supply and demand will move more closely into balance next year, from a shortfall of 16m bags in 1995-96, Mr Eagles argues that consumers have not replenished their stocks for several years. This leaves coffee stocks held by roasters in consuming countries at their lowest level for at least four years, a factor which will underpin prices.

In addition, Brazilian output in 1997-1998 could be hit by the poor flowering on some trees now. Mr Eagles says one co-operative has put the crop at 17.5m bags. However, the Economist Intelligence Unit yesterday forecast Brazil's crop at 26m bags for 1997-1998 - unchanged from the current season.

## COMMODITIES PRICES

## BASE METALS

## LONDON METAL EXCHANGE

(Prices from Amalgamated Metal Trading)

ALUMINIUM, 99.7 PURITY (\$ per tonne)

Close 1408.97 1284.25

Previous 1408.5-99.5 1282.35

High/Low 1408.5-99.5 1282.35

AM Official 1408.5-99.5 1282.35

Kerb close 1408.5-99.5 1282.35

Open int. 24,230

Total daily turnover 94,230

ALUMINIUM ALLOY (\$ per tonne)

Close 1340.45 1309.98

Previous 1340.45 1309.98

High/Low 1340.45 1309.98

AM Official 1340.45 1309.98

Kerb close 1340.45 1309.98

Open int. 6,872

Total daily turnover 1,222

LEAD (\$ per tonne)

Close 674.5-73.8 693.65

Previous 674.5-73.8 693.65

High/Low 674.5-73.8 693.65

AM Official 674.5-73.8 693.65

Kerb close 674.5-73.8 693.65

Open int. 36,281

Total daily turnover 7,688

NICKEL (\$ per tonne)

Close 6725-43 6820-35

Previous 6725-43 6820-35

High/Low 6725-43 6820-35

AM Official 6725-43 6820-35

Kerb close 6725-43 6820-35

Open int. 48,616

Total daily turnover 8,216

TIN (\$ per tonne)

Close 6725-43 6820-35

Previous 6725-43 6820-35

High/Low 6725-43 6820-35

AM Official 6725-43 6820-35

Kerb close 6725-43 6820-35

Open int. 48,616

Total daily turnover 8,216

SPECIAL HIGH GRADE (\$ per tonne)

Close 1025-36 1050-70

Previous 1025-36 1050-70

High/Low 1025-36 1050-70

AM Official 1025-36 1050-70

Kerb close 1025-36 1050-70

Open int. 19,464

Total daily turnover 3,941

COPPER, grade A (\$ per tonne)

Close 3400-45 2175-78

Previous 3400-45 2175-78

High/Low 3400-45 2175-78

AM Official 3400-45 2175-78

Kerb close 3400-45 2175-78

Open int. 172,501

Total daily turnover 93,661

LME AM Official 24-hour rolling

LME Closing 24-hour rolling

Spot 1697 3 mths 1697 6 mths 1697 12 mths

SPECIAL HIGH GRADE (\$ per tonne)

Close 1025-36 1050-70

Previous 1025-36 1050-70

High/Low 1025-36 1050-70

AM Official 1025-36 1050-70

Kerb close 1025-36 1050-70

Open int. 19,464

Total daily turnover 3,941

COPPER, grade A (\$ per tonne)

Close 3400-45 2175-78

Previous 3400-45 2175-78

High/Low 3400-45 2175-78

AM Official 3400-45 2175-78

## PRECIOUS METALS continued

GOLD COMEX (100 Troy oz; \$/troy oz)

Close 368.1 368.1

Previous 368.1 368.1

High/Low 368.1 368.1

AM Official 368.1 368.1

Kerb close 368.1 368.1

Open int. 24,230

Total daily turnover 94,230

PLATINUM NYMEX (50 Troy oz; \$/troy oz)

Close 570.0 570.0

Previous 570.0 570.0

High/Low 570.0 570.0

AM Official 570.0 570.0

Kerb close 570.0 570.0

Open int. 6,872

Total daily turnover 1,222

PALLADIUM NYMEX (100 Troy oz; \$/troy oz)

Close 115.48 115.48

Previous 115.48 115.48

High/Low 115.48 115.48

AM Official 115.48 115.48

Kerb close 115.48 115.48

Open int. 3,941

Total daily turnover 7,688

SILVER COMEX (5000 Troy oz; \$/troy oz)

Close 477.8 477.8

Previous 477.8 477.8

High/Low 477.8 477.8

AM Official 477.8 477.8

Kerb close 477.8 477.8

Open int. 36,281

Total daily turnover 7,688

ENERGY

CRUDE OIL NYMEX (1,000 barrels; \$/barrel)

Close 24.02 24.02

Previous 24.02 24.02

High/Low 24.02 24.02

AM Official 24.02 24.02

Kerb close 24.02 24.02

Open int. 19,464

Total daily turnover 3,941

COPPER, grade A (\$ per tonne)

Close 3400-45 2175-78

Previous 3400-45 2175-78

High/Low 3400-45 2175-78

AM Official 3400-45 2175-78

Kerb close 3400-45 2175-78

Open int. 172,501

Total daily turnover 93,661

LME AM Official 24-hour rolling

LME Closing 24-hour rolling

Spot 1697 3 mths 1697 6 mths 1697 12 mths

SPECIAL HIGH GRADE (\$ per tonne)

Close 1025-36 1050-70

Previous 1025-36 1050-70

High/Low 1025-36 1050-70

AM Official 1025-36 1050-70

Kerb close 1025-36 1050-70

Open int. 19,464

Total daily turnover 3,941

COPPER, grade A (\$ per tonne)

Close 3400-45 2175-78

Previous 3400-45 2175-78

High/Low 3400-45 2175-78

AM Official 3400-45 2175-78

Kerb close 3400-45 2175-78

Open int. 172,501

Total daily turnover 93,661

LME AM Official 24-hour rolling

LME Closing 24-hour rolling

Spot 1697 3 mths 1697 6 mths 1697 12 mths

SPECIAL HIGH GRADE (\$ per tonne)

Close 1025-36 1050-70

## GRAINS AND OIL SEEDS

WHEAT LIFE (\$ per tonne)

Close 60.0 60.0

Previous 60.0 60.0

High/Low 60.0 60.0

AM Official 60.0 60.0

Kerb close 60.0 60.0

Open int. 24,230

Total daily turnover 94,230

WHEAT CBT (5,000 bushels; \$/bushel)

Close 368.1 368.1

Previous 368.1 368.1

High/Low 368.1 368.1

AM Official 368.1 368.1

Kerb close 368.1 368.1

Open int. 24,230

Total daily turnover 94,230

MAIZE CBT (5,000 bushels; \$/bushel)

Close 24.02 24.02

Previous 24.02 24.02

High/Low 24.02 24.02

AM Official 24.02 24.02

Kerb close 24.02 24.02

Open int. 19,464

Total daily turnover 3,941

BARLEY LIFE (\$ per tonne)

Close 60.0 60.0

Previous 60.0 60.0

High/Low 60.0 60.0

AM Official 60.0 60.0

Kerb close 60.0 60.0

Open int. 24,230

Total daily turnover 94,230

SOYABEAN CBT (5,000 bushels; \$/bushel)

Close 24.02 24.02

Previous 24.02 24.02

High/Low 24.02 24.02

AM Official 24.02 24.02

Kerb close 24.02 24.02

Open int. 19,464

Total daily turnover 3,941



**FT MANAGED FUNDS SERVICE**

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Setting	History	Color	Time
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## WORLD STOCK MARKETS

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**Rockwell**

## US INDICES

## AFRICA

## AFRICA

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
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NOTES: - Prices on this page are quoted on an all-in basis, including exchange and any early bank interest. - All prices are in U.S. dollars. - All prices are for 100 shares.

SLM	40.85	-0.05	1
Sum	123	-2	2
Gr Net	28.92	-30	3
Gr Net	177		1

Offshore	186.75	-1.75	72	50	1.0
Offshore	186.75	-1.75	72	50	1.0
Offshore	319.75	-2.00	600	294	4.6
All Areas	82.50	-5.00	57	27.5	1.8
All Areas	137.50	-5.00	293	117	4.7
Others	16.55	-0.05	23	15	2.5

Prices supplied by Reuters

**NOTES** - Prices on this page are quoted as on the date of the interbank exchanges and are mostly last traded prices. Calculate your high and low, a double support. The data is obtained, as is each issue, or its rights, as is a 1 Percent in US \$.

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Stocks	Closed
Traded	Paid

3.2m	1350	-10
2.9m	278	-2
2.8m	1180	-20
2.8m	719	-8
2.7m	1850	-30





# Dow falls on profit-taking as techs rise

## Climb in dollar boosts individual stocks

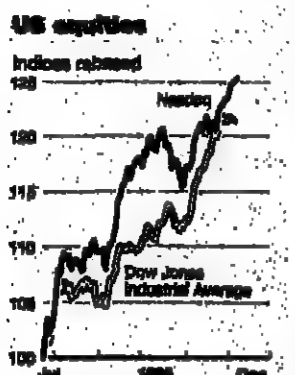
### AMERICAS

Soaring technology shares led the broader markets higher in morning trading but profit-taking sent the major indices into negative territory by early afternoon, writes Lisa Branstetter in New York.

At 1 pm, the Dow Jones Industrial Average was off 15.28 at 5,506.42, in spite of a 0.2% gain in IBM which brought the shares to \$164.

Shares drew some support from gains on the bond market that sent the yield on the benchmark 30-year Treasury down to 6.332 per cent at midday.

The Standard & Poor's 500, which had been on course to



set a new record high, slipped 1.54 at 755.00, while the American Stock Exchange composite rose 0.50 at 553.43. Volume on the NYSE was heavy, coming to 284m shares.

The Nasdaq composite, which is weighted toward the technology sector, was trading at a record high with a gain of 11.45 at 1,311.97.

Microsoft, Intel and Oracle, three of the four biggest companies on the Nasdaq were stronger - Microsoft added 0.4% at \$158.94, Intel was

0.1% stronger at \$128.00 and Oracle gained 0.1% at \$50.74 - but some of the biggest rises came among smaller Nasdaq issues.

Spyglass, the Internet browser company, added 0.4% at \$18.44 and Hutchins Technology, which makes parts for computer disk drives, soared 0.5% or 99 per cent to \$67.44 after announcing that it expected first quarter earnings to beat analysts' projections.

Silicon Graphics jumped 0.4% or 17 per cent to \$25.34 after Goldman Sachs raised its rating on the company.

Elsewhere, the big three carmakers all posted gains yesterday. General Motors, which is a component of the Dow, added 0.1% at \$59. Ford was 0.1% stronger at \$33.44 and Chrysler climbed 0.4% to \$36.44.

Summit Technology, which makes lasers that can correct vision problems, climbed 0.4% or 33 per cent to \$8.44 after Food and Drug Administration agreed to allow the company to expand clinical trials of a new laser system.

TORONTO had a mixed morning session in dull volume, gleaming little comfort from the solid start on Wall Street. At noon, the 300 composite index was up 4.59 at 5,988.38.

Gold was the main culprit with the gold subsector sliding almost 2 per cent on the back of a weak bullion price. Barrick Gold fell 0.51 at \$53.40.

Alcan Aluminum was off 80 cents at \$34.50 and Canadian Pacific 5 cents at \$37.65. Royal Bank of Canada stayed on the upside, adding 35 cents to \$34.35.

Inco dipped 25 cents to \$34.75 but Moore Corporation added 4 cents to \$32.80. Chateau Stores held at \$97 in spite of a fall in third quarter earnings.

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### EUROPE

Accelerated gains in the dollar and rising bonds both lifted equity markets, and all-time highs became almost a matter of course; but it was the effect of currency movements on exporters and other dollar earners which consistently drove individual stocks.

FRANKFURT saw gains of 5 per cent or more in leading exporters like BASF, Bayer and BMW, up by DM2.88 at DM60.88, DM1.18 at DM58.55, and DM59.30 at DM1,075.90 respectively.

The Dax index closed 47.30, or 1.7 per cent higher at an all-time high, all time high of 2,900.78. Ms Barbara Altmann at B Meteler noted that it was less than a month since the Dax broke through 2,700, an off-quoted 1996 target, and just over two weeks since it breached the 2,500 level.

That she said, had pushed traders into covering short term positions, and institutional investors into buying equities at the expense of bonds, where yields were falling.

Turnover rose from DM9.2bn to DM11.3bn, led by Volkswagen which, still depressed by its legal battle with General Motors of the

US, rose just DM1.70 to DM54.70 after a four-day fall of DM4.71.

Other automotive stocks did well, with Continental and Daimler up 3.4 and 3.5 per cent respectively; but Porsche was quiet, DM10 higher at DM1,200, after a 30 per cent gain in 12 days in November 26 and a quiet approach yesterday to earnings growth prospects in 1997.

PALFINGER drove up to within a whisker of best ever levels, before closing 30.48 ahead at 3,949.11 on the CAC 40. This was 11.87 points short of the 1994 all-time high.

Dollar beneficiaries led the market higher, notably LVMH which climbed by FF6.90 or more than 4 per cent to FF1,394. The group was also lifted by renewed talk that it was about to sell its 20 per cent stake in Guin-

Unsettled by recent curbs on short-selling, BOMBAY fell steeply for the second day in succession. At the close, the BSE index was off 56.43 at 2,794.0 for a two-session decline of more than 3 per cent, sliding to its lowest level for three years.

A number of disappointing results also kept the pressure on the downside. Traders said they had seen aggressive selling from both local funds and foreign institutions.

TOKYO fell for the fifth consecutive trading day, following the release of third-quarter gross domestic product figures which led to uncertainty about Japan's economic recovery, writes Owen Robinson.

The Nikkei 225 average shed 44.15 to 20,690.56 after a moving between 20,478.74 and 20,782.53. Some blue chips, including electricals and pharmaceuticals, gained ground but about 300 issues sank to new 1996 lows as heavy selling by domestic institutions in the afternoon offset foreign buying.

Volume rose from 224m shares on Monday to an estimated 269m. Declines led advances by 733 to 304, with 203 unchanged. The Topix index of all first-listed stocks fell 8.55 to 1,535.64 and the capital-weighted Nikkei 300 lost 1.11 at 290.14.

In London, the ISE/Nikkei 50 index added 1.13 to 1445.08.

Domestic investors were discouraged by the decline in Honda, a recent market leader, which fell 770 to 73,220 as investors took profits on the stock's recent gains.

Some electricals and high-technology stocks were also among major losers. TDK declined 1150 to 77,110, Hitachi Y10 to 71,040 and Fujitsu Y10 to 71,040.

Among those to resist selling pressure, Canon added 220 to 72,360 and Fuji Photo Film rose 53.50 to 73,530.

### FTSE Actuaries Share Indices

FTSE Averages Share Indices					
Dec 3	Nov 29	Nov 28	Nov 27	Nov 26	Nov 25
Weekly changes	Open	High	Low	Close	Change
FTSE Eurotrack 100	1093.86	1095.29	1094.29	1096.46	1096.46
FTSE Eurotrack 200	1090.00	1092.19	1090.57	1091.51	1091.51
Dec 2					
FTSE Eurotrack 100	1077.55	1087.70	1087.70	1087.70	1087.70
FTSE Eurotrack 200	1083.78	1082.27	1082.27	1082.27	1082.27
Index only: 1000 CHANGES: High/Low: 1000 - 1000.00, 1000 - 1000.00					
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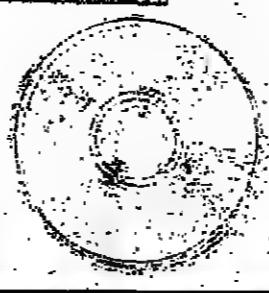
Monday December 4 1996  
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**Singapore:**  
The Intelligent  
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Pages 10-12

# Information Technology

Wednesday December 4 1996

**L**ike a tidal wave washing over the world, the Internet and inter-networking has transformed the outlook for the information technology industry, and the packaged software vendors who have come to dominate it over the past decade.

Eighteen months ago, Microsoft, the world's largest software company, looked like it had missed the Internet wave as upstarts such as Netscape Communications, NetManage and Yahoo! grabbed the limelight - and investors' dollars - in a series of spectacular technology flops.

But since then, Bill Gates, Microsoft's chairman and chief executive, has proved once again that he is the consummate competitor, transforming his company's prospects through an Internet strategy that he called 'embrace and extend' which has put Internet technology at the core of all Microsoft's products.

As Gates noted during his Comdex keynote speech in Las Vegas a few weeks ago: 'The Internet is like a gold rush, the amount of excitement, the number of new companies - it is really unbelievable. Now, fortunately, this is a gold rush where there really is gold.'

**Deep impact**

'It may be buried a little deeper than some people think, but the drops in the price of communications, and the fact that PCs everywhere will eventually have very high speed data rates allowing them to work together, really will have a fundamental impact,' said Gates. 'In fact, it will mean that our industry will be changing the way people do business, the way they learn and even the way they entertain themselves, far more than I think people outside our industry expect.'

In its attempts to outflank competitors, Microsoft is drawing upon its vast resources to help leapfrog its competitors. For example, in a recent filing with the US Securities and Exchange Commission the Redmond, Washington-based group disclosed that 'Microsoft is betting that over the next decade, Internet use will grow dramatically. Next year, (fiscal 1997), research and development spending, broadly defined, will grow to more than \$2bn, at a growth rate faster than sales.'

As the Yankee Group research firm noted recently, Microsoft's revenues are likely to grow by about 18 per cent to around \$10.2bn next year. 'It looks like Netscape, with projected revenues of \$400m in fiscal 1997, had better spend its R&D money wisely.'

Indeed, the latest version of Microsoft's Internet browser software, Internet Explorer 3.0, is reckoned to be on a par with Netscape's own offering and, helped by an aggressive marketing programme, has been widely adopted by Internet service providers including commercial online services and four of the largest service providers in the UK.



## Suppliers surf the Internet wave

Software companies are in a desperate race to win greater shares in the enterprise-wide computing market, reports Paul Taylor

Perhaps even more importantly, a revitalised Microsoft has repositioned its desktop operating systems, office applications software and back-office suite to take advantage of the shift to Internet technologies and the transformation of corporate local and wide-area networks into so-called 'intranets'. The prize at stake is to become the key supplier of a new generation of 'enterprise software' to corporate customers around the globe.

'We believe a compelling battle is shaping up in the enterprise space as Microsoft must prepare to slug it out with Oracle, IBM and Hewlett-Packard in order to achieve what we believe is the ultimate objective, dominance in the lucrative enterprise computer space,' says Marshall Senk, an analyst with US-stockbrokers Robertson, Stephens & Company in a recent note.

Indeed, Microsoft's resurgence, reflected in both the buoyant tone of Mr Gates recent speeches as well as the company's share price, and has come despite the challenge of companies such as

Oracle, the second largest software company, and Sun Microsystems, the leading Internet server vendor.

Both Oracle's Larry Ellison and Scott McNealy of Sun have been enigmatising about the purported cost and other advantages of platform-independent Network Computers and the Java programming language. For all three companies, the next six months could be decisive in their battle for the corporate desktop.

**At a crossroads**

For one thing Java, which was developed by Sun, is at a crossroads and most analysts believe its longer-term success or failure will be determined in the next six months. As the commentators on the Ziff Davis web site note: 'If you want to know its fate in advance, watch the top 10 software companies. Almost all of them are choosing right now between Java and Microsoft's ActiveX.'

'Once they decide, the rest of the industry will follow. At stake

is whether we continue in a Microsoft-dominated world, or whether new leaders emerge.'

Similarly, for Larry Ellison of Oracle, promoting the low-cost network computer (NC) has become a personal crusade. But it now seems probable that sales of NCs or 'thin clients' will be slower and less substantial than he and many of the original promoters suggested.

Instead of a battle, PCs, NetPos (a 'compromise' standard proposed by both Microsoft and Intel) and NCs are likely to co-exist as part of a much larger family of intelligent digital devices, each adapted for a specific environment and linked together by wired and wireless networks.

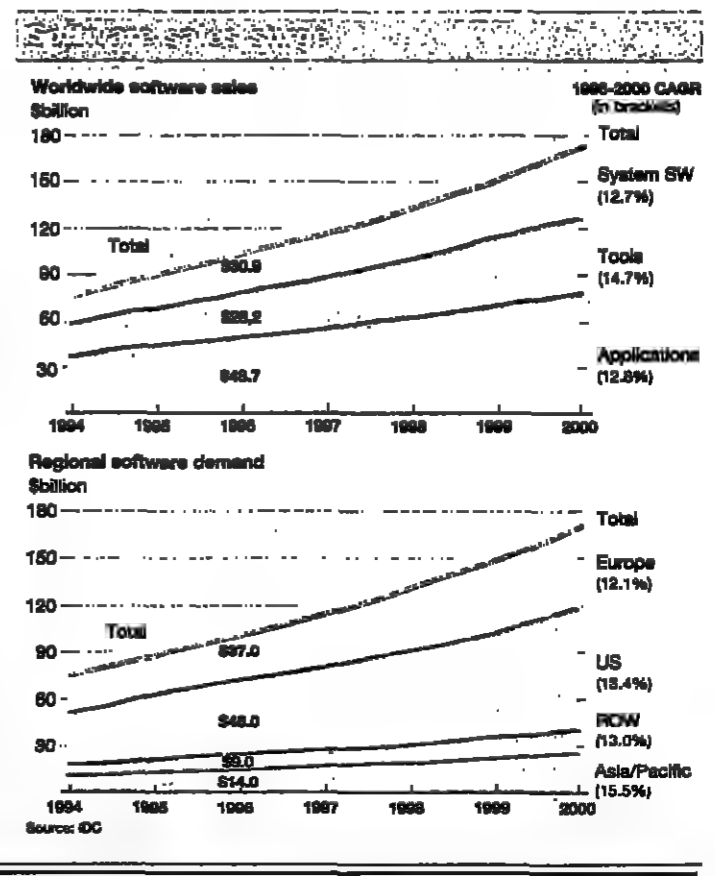
But while such an outcome might be seen by some as a personal setback for the most vociferous advocates of NC computing, the debate has already had several important repercussions.

First, it has helped establish the issue of 'total cost of ownership' of corporate computer systems as a key item on the IT agenda. Second, it has helped

broaden boardroom awareness of companies such as Oracle - historically, a relational database vendor which was little known outside corporate IT departments.

In the forthcoming battle for next generation of enterprise IT systems - which is more likely to be decided in the boardroom than the IT department - brand name, corporate image and awareness could prove as important as the underlying technology.

The leaders of the global \$108bn software industry - such as Microsoft, Oracle and Computer Associates, the third largest software vendor - clearly recognise this fact. Not only do they invest heavily on research and development, they also spend huge amounts on marketing and customer-relations including large scale user-conferences and exhibitions such as Computer Associates' 'CA World' event held in New Orleans a few months ago, which was attended by thousands of business



## Leader or Loser?

How will your business match up to the year 2000 date change challenge?

'The sheer nature of the problem means it is not just another technical issue. Its size makes it a management issue... and because it is a management issue, it requires top level management time on it.'

Adair Turner, Director General, CBI

'All SB business units will establish plans to ensure their internal systems will be Year 2000 compliant by 31 December 1998. This is mandatory and should take precedence over all other systems work'

Jan Leschly, Chief Executive, SmithKline Beecham

'By leveraging a public increasingly informed about the potential for chaos and risk when the year 2000 rings in, compliant businesses will... challenge competitors to match them. Compliant companies will be the new leaders in their respective industries.'

Gartner Group

'The changes should be seen primarily as a managerial challenge not something simply requiring a technical solution. Those companies that put in place the top leadership and commitment to a formal programme today will be the ones that come through unscathed in 2000.'

Chris Earnshaw, Managing Director, BT Networks and Systems

Leading organisations (and increasingly, their customers) understand that the date change challenge is massive - and above all, that it is a business not an IT matter. Time is short and the last chance to decide is imminent: will your organisation be a leader or a loser? Failure to act now could be the ultimate failure of your business. For information and support regarding senior management awareness contact Robin Guenier, Executive Director of Taskforce 2000 - call 0171 562 7650. Taskforce 2000 is a not-for-profit company dedicated to ensuring UK companies and their business systems will be ready and able to deal with the Year 2000 date change. It is a joint initiative of the Department of Trade and Industry (DTI), Confederation of British Industry (CBI) and the Computing Services and Software Association (CSSA)



Interview with Gordon Eubanks of Symantec • By Paul Taylor

# Beware the seduction of technology

IT companies pre-occupied with anti-Microsoft strategies are in danger of failing to meet customer needs

Gordon Eubanks, chief executive of Symantec, the US personal computer software group, says he has successfully steered his company through the turmoil of the PC industry over the past decade by focusing on one simple objective: satisfying customer needs.

"The primary focus of Symantec is in two areas, protecting and maintaining desktop computers and communication among mobile workers," he says.

He is critical of other industry leaders, including those promoting the so-called network computer (NC) or thin clients, who have allowed themselves to become "seduced" by technology for technology's sake or side-tracked by personal vendettas and political agendas.

"I think anytime something is created out of a desire to compete with a competitor, rather than to satisfy fundamental customer needs, it becomes problematic. To get momentum, you must meet customer needs," he says.

"Successful companies focus their energies on customers and understanding the needs of customers over a long period of time. Companies that get preoccupied with focusing on Microsoft and develop anti-Microsoft strategies, are in danger of really failing to meet customer needs in the long-term," he adds.

Nevertheless, he acknowledges that the network PC

debate has helped focus attention on some important issues. "Cost-of-ownership is a real customer issue," he says, "but you can run current desktop computers in a way to obtain the same objective."

"The real issue isn't that you don't have a hard disk on network computers - the more important issue is that the machine is remotely manageable and remotely supportable: these are the kind of issues that really lead to low cost of ownership."

He also believes the new emphasis on cost of ownership should be good for sales of Symantec's anti-virus, data protection and Java application development products. "Overall, we are about protecting data and saving money. If you are in a small business, the protection is much more important than our cost of ownership applications, but as you move to a larger group, cost of ownership becomes more important."

Symantec has been quick to seize upon the opportunities presented by the Internet. For example, Symantec supplies Café, one of the leading Java development tools. Eubanks says Symantec has focused on Java because in large and medium businesses, Java can improve the manageability and the cost of internally developed applications.

He is, however, characteristically cautious about the Internet's prospects as a software delivery channel - "it



Eubanks: 'customers must come first'

will be used as a [delivery] channel, but I see it much more as a channel delivering content than as a channel for delivering the equivalent of packaged goods software because we don't have the bandwidth now to download really large applications," he says.

Nevertheless, he does think the Internet can play an important role in delivering software "bug fixes" and maintenance. Earlier this year, Symantec introduced a concept called "live update"

aimed particularly at home and small business users who do not have the luxury of large corporate IT departments ready to help fix problems and search out software updates and patches.

"It may come as a surprise to people like us in the software industry, but customers actually expect software to work," says Eubanks.

What they do not expect is to find that the software package they have just bought is not the latest version or that it needs bug

fixes and patches to make it work properly.

Symantec's recently shipped products all include the "live update" technology. "You take the product home and you install it, push the button and it tracks down any patches or fixes that are needed," says Eubanks who believes the technology gives Symantec a crucial competitive edge.

On anti-virus issues, he says, "there is a lot of emotion in this business with leading competitors comparing each other and yelling and screaming, claiming they have the best products."

"The truth is that we think our detection rate is as good as anyone else's, but most times the leading products find virtually all the viruses that are 'in-the-wild'." The problem isn't that you can find all the viruses, the problem is that customers need to get updated because there are new in-the-wild viruses all the time.

"Most people are probably aware of anti-virus software, many of them have it, those who don't should get it. Most of them, however, are not protected and they don't understand that. They aren't protected because they are not getting updates every two weeks."

However, by using "live update" on a regular basis, Eubanks believes it is possible to deliver the latest virus "antidotes" to home and small business customers in a timely and cost-effective way.

"This is an example of the Internet really providing value to customers," he says, "because without the Internet and without the tremendous momentum towards

communications, we couldn't provide this service because enough people wouldn't have modems or be connected."

Symantec also sees the trend towards mobile computing as a big opportunity. "The mobile professional wants to connect in the office, at home, on a train, on a plane in a car and standing in the airport," says Eubanks.

In addition, Symantec, which acquired Delrina, the communications software specialist in 1995, also sells faxing and remote access

ideas. There is tough competition everywhere for us. What we try to do is to add value for customers and not get preoccupied with Microsoft. I think we have a good relationship with them, although we compete with them in Java. I honestly respect what they have done and I think by-and-large, Bill and his team have earned what they have got.

"They are tough competitors, but I think competition is healthy."

"What we do is focus on segments of customers with whom we can have a long

relationship, providing them with value. If their needs change, we change."

The other area Symantec is focusing on is the market for software which provides PC users with help or advice on fixing problems such as colour printers that will not print in colour or CD-Rom drives which refuse to read a particular disk.

Symantec's new PC Handy-Man software has three main components: first, it monitors the system for crashes then intercepts the crash and allows users to save data.

Second, it continuously conducts about 15 background checks on the system; and third, it includes some "smart" agent technology that helps the user solve problems. However, he firmly rejects the notion that computer users are seg-

**'Computer-users are not generally interested in how a computer works - and why should they be?'**

ments into "know-nothing people and experts." Generally, he says computer-users who buy software are competent but not "look-under-the-hood" types.

"They are not interested in how a computer works - and why should they? The idea that these people are scared, naive or incompetent is silly. What they want is a computer to work."

"What they don't want to do is become computer maintenance people. If they wanted to do that, they would go into the IT profession."

Mostly, Symantec's strategy has worked well - "from our public offering we had 16 quarters of great growth, eight of those quarters consecutively we outgrew Microsoft," notes Eubanks. Then however, the growth stopped. "The Windows 3.1 market began to mature and people were looking towards Windows 95," he notes.

Symantec bet heavily on the success of Microsoft's new desktop operating system, launching three new products in eight languages in August last year. "We had done the best job of anyone in delivering the Win 95 product," says Eubanks, "but Win 95 didn't turn out to be what we expected."

He adds: "It's not just that companies didn't buy Win 95, they haven't bought any new operating system."

Eubanks believes it is only a matter of time before corporate buyers switch to the new 32-bit operating systems such as Windows NT or Windows 95. But for the moment he admits that his biggest challenge is getting Symantec back on the growth track.

## FT Review of Information Technology

The FT-IT Review is published on the first Wednesday of the month, except in August. In addition, a weekly FT-IT news and feature page is published on each of the other Wednesdays of the month.

FT-IT Review, editorial controller: Mike Whitshire  
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Writers in this issue (Volume two, number ten): Paul Taylor, IT Correspondent; Geoffrey Nairn, Louise Kehoe, Michael Dempsey, Tom Foremski, Rod Newing, George Black, Rhys David, Philip Manchester, John Kavanagh, Michael Whitshire, Geoffrey Wheelwright.

Graphics: Robert Hutchison and Steven Bernard  
Illustrations: Mark Thomas (cover), and John Springs  
Picture research: Patricia Lee and Matthew Glynn.

The next issue, January 3, 1997  
Main focus: Key issues for IT business users in the last three years of the 20th century, including the 'Year 2000' problem and the impact of European monetary union.

February 5, 1997 issue:  
Main focus: IT in Health.  
Software theme: Personnel and Human Resources.  
New Directions: a further report on the wider IT implications of European monetary union, ERM.

Themes for 1997: see list on page 5

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## Surfing the Internet wave

# Market may reach \$180bn by year 2000

Continued from page one:

leaders. Such high profile events are made even more necessary by the speed of innovation and development in the Internet-enabled and highly competitive software industry where small, fast-moving competitors can develop a product, test it and then market and distribute it over the Internet.

This low-cost publicity and distribution route has helped hundreds of small technology start-ups, ranging from Internet search companies to networking specialists and Internet security companies, to establish a foothold in the software market.

## Acquisitions

Many of these small companies are based outside the US, Europe and other centres of technology innovation, such as Israel, but have come to market on the Nasdaq or other small business exchanges, such as Britain's Alternative Investment Market. Other innovative software businesses have been snapped up by larger, longer-established IT companies eager to plug technology gaps or accelerate time-to-market.

This process has helped stoke the surge in mergers and acquisition activity in the IT sector which has been evident over the past two years, and fuelled the continued consolidation of the software industry at the top level. According to *Software Magazine's* annual top 100 rankings, published in July,

the revenues of the top 10 packaged software vendors grew by an above industry average 31.5 per cent last year. Together, they accounted for 67 per cent of the total revenues of the top 100 software companies, up from 63 per cent the previous year.

Among the acquisitions last year, Microsoft bought UK-based Network Managers and Netwise, Computer Associates bought its rival, Legent, for \$1.8bn, Oracle acquired IRI Software and Sybase acquired Powersoft. Meanwhile Novell, the only software vendor in the top 10 not to have increased revenues last year, sold its WordPerfect applications suite to Canadian-based Corel, earlier this year.

Of the top 100 software companies, more than 40 made at least one acquisition last year with Platinum Technology, software tools company, as a Quarterdeck leading the spending spree.

With product cycles continuing to shorten and R&D investment becoming increasingly costly, the pace of acquisitions looks likely to accelerate.

Meanwhile, customer demand remains strong, spurred on by the growth of the Internet, electronic commerce and enterprise computing.

According to International Data Corporation, the world software market is growing at a compound annual growth rate of more than 13 per cent and will be worth almost \$180bn by the end of the decade.

## World's top 20 software vendors

Rank	1995	1994	Company and web address	Chairman/President	1995	1994
1	1	1	Microsoft Corp http://www.microsoft.com	William H. Gates III	2,771	2,044
2	2	2	Computer Associates International Inc http://www.cai.com	Charles B. Wang (Barney Kumar)	3,198	2,455
3	3	3	Oracle Corp http://www.oracle.com	Elton S. Johnson	2,565	2,044
4	4	4	Novell Inc http://www.novell.com	Robert J. Frankenberg	1,890	1,800
5	5	5	SAP AG http://www.sap.com	Henrich Reinecke (Gerrit Zech)	2,480	2,141
6	7	7	Sybase Inc http://www.sybase.com	Mark B. Hoffman	766	720
7	8	8	Adobe Systems Inc http://www.adobe.com	John E. Warnock (Charles M. Gasconia)	2,192	2,076
8	12	12	Informix Software Inc http://www.informix.com	Philip E. White	538	384
9	13	13	SAS Institute Inc http://www.sas.com	James H. Goodnight	1,254	1,172
10	15	15	Symantec Corp http://www.symantec.com	Carl D. Deryn (Gordon Eubanks)	457	423
11	14	14	BMC Software Inc http://www.bmc.com	David J. Glaser	1,100	1,000
12	19	19	Starling Software Inc http://www.starling.com	Sern Wily (Starling L. Williams)	390	289
13	17	17	CompuLink Corp http://www.complink.com	John J. Gagliardi	1,100	1,000
14	11	11	Software AG http://www.sage.com	Daniel F. Glits	376	364
15	16	16	Novastar Corp http://www.novastar.com	Robert J. Glits	1,100	1,000
16	18	18	Dyn & Bradstreet Software http://www.dynsoftware.com	Doug MacIntyre	285	265
17	20	20	Symantec Corp http://www.symantec.com	Carl D. Deryn (Gordon Eubanks)	457	423
18	24	24	JD Edwards & Co http://www.jdedwards.com	C. Edward McVane	287	100
19	21	21	Intergraph Corp http://www.intergraph.com	Robert M. Anderson	1,100	1,000
20	23	23	Cardinal Corp http://www.cardinal.com	Nancy Chertok	250	218

Source: Software Magazine July 1996

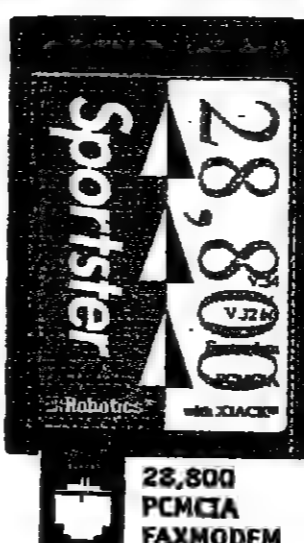
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## Systems for small offices

Here and on the following three pages, FT writers look at innovations in equipment and services for the small office/home office (SoHo) sector



Multi-function five-in-one plain paper fax machine from Muratec: the M5700, with modern, digital answering machine, printer, scanner and copier

■ IT equipment and services • Geoffrey Naim

# Focus sharpens on the needs of small companies

There are more than 50m small businesses in Europe, the US and Japan – representing a key but highly complex market for suppliers of information systems

Powerful desktop PCs have become essential tools for many small businesses and entrepreneurs, and the PC industry has woken up to the potential of the small office/home office (SoHo) market and learnt how to design machines that appeal to the distinct needs of these users.

With more than 50m small businesses in the US, Japan and Europe, the SoHo market is one of the most dynamic sectors of the PC industry. But reaching these users is not as simple as selling PCs in consumer or corporate markets – “by focusing purely on” home or corporate PCs you miss a fair chunk of the market,” says Jean-Luc Meyer, marketing manager for small business computing at Hewlett-Packard Europe.

The PC industry invented the term SoHo in the early 1990s when sluggish sales to traditional corporate customers forced vendors to seek out new markets. The growing army of small businesses and self-employed seemed to fit the bill perfectly, particularly as their IT usage is traditionally low.

The PC industry has long known what features matter to corporate buyers. More recently, it has learnt to build PCs that appeal to consumers – and vendors such as IBM, Acer, Compaq and Olivetti have launched home PCs that combine cutting-edge multimedia technology with ease of use and stylish design.

But the needs of SoHo users have often been neglected – “for a very long time there has not been a product targeted at the SoHo market,” says Emmanuel Laloux, manager with market research firm, Context Research.

“There were low-end PCs with basic specifications, which are unsuitable

because of their lack of communications, or high-end PCs designed for corporate users.”

Vendors first tried to tap the SoHo market using basic models from their corporate range, sold at knock-down prices through dealers and shops, with added office software – and perhaps a printer – to create a SoHo “bundle”.

This strategy had limited success, however, and vendors now realise the SoHo market is more complex than they originally thought.

“It is a mistake to talk about the SoHo market as it is not a single segment, but an agglomeration of users with different needs,” says Emmanuel Laloux.

The US market research company Computer Intelligence has studied how the technology needs of the self-employed differ from those of small businesses and consumers. According to CI, the self-employed repre-



Live video: smaller businesses and home offices are discovering that videoconferencing is not just the preserve of multinationals. Personal computer users can extend their international reach with videoconferencing on PCs with this plug-in kit from PictureTel. The “Live100” system gives full-colour, full-motion video and high quality sound, in a screen-sharing collaborative computing environment. Video calls are set up within a Microsoft Windows environment; more details on +44 (0) 1753 673000. See also reports on teleworking and the growth of ISDN systems, Page 5

sent a distinct segment with some similarities to the other two but also important differences.

For example, the self-employed use their PCs fewer hours a week than small businesses, but are heavier users of online services and the Internet. They spend more money on a PC than consumers but the chosen model may have to double up as a machine for the whole family, running entertainment and educational packages.

Vendors are now building PCs to tightly target distinct groups of SoHo users. Hewlett-Packard, for example, identifies four “clusters” of users:

- Productivity workers.
- Communicators.
- Collaborators and persuaders, such as graphic designers. Each potential customer fits one of these descriptions, according to HP, and this enables the company’s dealers to quickly decide which HP models suit the customer’s needs.

The HP Vectra 500 range of PCs, launched earlier this

year, was designed specifically for small businesses and in Europe it comprises nine models. Once the dealer has identified which cluster best describes the potential buyer, the choice can be whittled down to just three or four models.

“We have deliberately limited choice to make [the categories] easier to use,” says HP’s Jean-Luc Meyer. “One of the problems with small businesses is that they get confused by vendors. We want to simplify their lives.”

All models come with pre-installed Microsoft Word software and, in most countries, Microsoft Publisher and Office for Windows 95.

On the communications-oriented models, HP includes a 28.8Kbps modem, Internet access software and other communications programs, such as America Online.

Europe access, Intel ProShare data-conferencing software and, in France, Minitel access.

The HP Vectra 500 models also have a built-in communications centre to handle voice, e-mail and fax mes-

sages. Many small businesses rely on employees juggling IT duties with their real jobs, so HP has tried to ensure its Vectra 500 systems require the minimum of support.

## User support

The company found that 40 per cent of support calls are about printing problems, so it has pre-installed on each PC drivers for HP printers to ease the task of setting up a printer. An on-line trouble-shooting guide helps users identify and solve problems and, if necessary, explain them to HP staff over the phone. For more serious faults, HP engineers can run remote diagnostics software on the PC via a modem link.

The three-year hardware warranty includes next-day on-site support during the first year, while HP offers optional telephone support for more than 100 business software packages.

Other vendors are following HP’s example and closely targeting the SoHo market.

Compaq is Europe’s leading PC supplier, but in the SoHo segment it has lagged. The company is trying to make up the lost ground by including SoHo models in its Presario range of consumer PCs. These have features such as integrated fax and answering machines, talk-and-send modems to allow small businesses to juggle two phone lines, and a scanner keyboard to scan documents or business cards into the PC, where the images can be edited or faxed using built-in software.

“SoHo users are not computer experts,” says Toon Bouten, European vice president for consumer business at Compaq. “So you generally have to make things easy”. The Presario range feature “Easy Access” buttons on the front panel that give users immediate access to frequently used functions, such as retrieving a message on the answering machine.

Compaq is also adopting Universal Serial Bus technology, which promises to ease the task of installing PC peripherals.



Computer equipment for the smaller business: the HP Vectra 500 Series PC, pictured with the HP Network Kit, the LaserJet 6P, the HP ScanJet 4P, plus the Colorado T1000e and HP DeskJet850C



Jean-Luc Meyer: today’s market is far wider than just PCs

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4 FT-IT

IT in small offices

■ Personal computer sales ■ By Michael Dempsey

## Bargains are here to stay

There is a thriving market supplying relatively cheap PCs to consumers who do not need to be at the cutting edge of technology

The latest sales leaflet from Morgan Computer, a no-frills UK IT retailer, offers a high specification colour notebook PC for £800.

Morgan sells surplus stock from other retailers, and this particular PC is part of the inventory of the failed German-owned home computer retailer, Escom. An over-ambitious expansion strategy undermined Escom's ambition to have a PC shop on every UK high street. Escom bought up some 300 shops formerly owned by electrical goods merchant Rumbelows, but could not move enough machines fast enough to remain in business, leaving it in receivership.

Morgan's stock-list covers a wide range of "not quite leading edge kit" that the original manufacturers have chosen to dispose of. Technology this cheap is great news for small office and home office (SoHo) users. But its availability underlines the harsh facts of life for PC makers: to be a successful supplier of PCs takes huge volume sales.

One of Morgan's current lines is Olivetti equipment. Pentium PCs selling for £750, \$66-based machines available at £400-£500. Any analyst pondering Olivetti's recent announcement that it intends to sell off its PC division need look no further than these prices for the company's motive.

With the restricted shelf-life of new technology and a mass international market creating constant pressure on prices, a succession of companies have announced their intention to quit the field or alter the nature of their participation.

Last year, AT&T's NCR arm said it would stop manufacturing its own PCs and contract out the assembly, concentrating entirely on large corporate customers; the UK's ICL spun off its PC division to its Japanese par-

ent Fujitsu. Meanwhile, Bull retains a 51 per cent stake in the marketing company of its former Zenith Data Services PC unit in Europe, but has sold the ZDS line off to a consortium of Japan's NEC and US PC-maker Packard Bell.

ZDS has some phenomenal orders to its credit, including the lion's share of Desktop IV, a \$1bn deal to supply the US Air Force with 400,000 PCs. Yet running ZDS dragged Bull's results into the red.

With this continuing shake-out, how long will suppliers such as Morgan be able to offer bargain basement equipment? Surely a declining number of companies will stop the downward trend in prices? Mr Tom Willett, sales director at Morgan, thinks not - "companies have got better at managing inventories, but the pace of change has accelerated," he says. "Big organisations have trouble reacting quickly."

### Adaptation

He cites Gateway 2000 - a ten-year-old PC producer based in Sioux City - as a company that learned to adapt to changing demand quickly by focusing on the small order market. Mr John Shephard, Gateway 2000's UK general manager, says around 85 per cent of his customers are small businesses or home PC purchasers. With an entry model PC priced at \$299, Mr Shephard reckons his company operates at a net profit margin of 8 per cent. The secret is to churn out boxes: "Ours is a volume business, we sell more than one million machines worldwide every year."

Dealing direct with the public cuts out distributors who eat into margins. Mr Shephard thinks PC prices are bottoming out, but sees no rise in component costs ahead - and cheap compo-



It's a buyer's market in the run up to Christmas, there are plenty of good offers for potential PC purchasers

nents have dragged down unit prices.

Compaq, with a \$14.8bn turnover, is the largest PC-maker in the world. Economies of scale allow it match the emerging entry level standard price of £900, but Mr Bruno Didier, Munich-based vice president for PC products in Europe, says low prices alone are no guarantee of survival.

"The PC environment in Germany is very tough, and any attempt to buy market share just using price always fails. Escom failed because it set the lowest possible price and then relied on phenomenal market growth," he says. Mr Didier believes that small business owners are learning to look at the cost of ownership of a PC over its lifetime, and claims Compaq's ability to support its products is a huge sales incentive.

Mr Howard Strowman, director of London-based PST, has relationships with "virtually every PC manufacturer in the world". Mr Strowman cheerfully defines his business as "the undertaker: we're the funeral director of the IT world". He buys up excess stock, selling on to outlets such as Morgan, or spotting less developed overseas markets where price is more important than state-of-the-art technology.

Mr Strowman makes his profit from the instinctive view that leading edge systems are not necessary for many ordinary PC users across the globe. As he puts it: "You don't have to own a Ferrari to drive down the street". Despite the endeavours of corporate analysts and marketing teams across the industry, he sees no end in sight to the supply of discontinued machines.

"The actual pace of change and price degradation means there will always be people who get their forecasting wrong. There are 1,001 reasons why people get left with surplus stock in the computer business."

His experience suggests a secure future for the shrewd individual who is prepared to bid his time and does not need to leap in and purchase when a new product is unveiled. "I bought a \$5,000 IBM portable two years ago, in New York. Less than 12 months later the same machine was on sale in the UK for £1,800, or around \$2,800."

The SoHo world is not an immediate target for Sun's JavaStation, a slimmed-down PC dedicated to networking. But the pricing of this product aimed at corporate (2519-£700) will exert yet another powerful influence on PC prices. The bargains are here to stay.

■ Multifunction machines ■ By Geoffrey Wheelwright

## All in one or stand-alone?

It is important to think well ahead when buying key peripherals

Even if the desktop computer in your home office has all the latest software and built-in gadgets, you will still find that the outside world expects you to produce documents that it can deal with on paper.

The paperless office is not here yet. This then forces you to look at buying a printer, a photocopier, a fax machine or a scanner (for getting paper documents, and illustrations into your computer) - or a device that can manage all of these tasks at once.

Today's home office equipment products are so flexible and powerful that often it does not make sense to put them together piece by piece. You may decide that all you need to begin with is a simple photocopier. So you go out and buy a small, slow and inflexible machine that will just about do what you need right now.

Within a few weeks, you might then find that clients are starting to ask you to fax documents to them - and you are now running down to the local office services shop several times a day to get them to send faxes for you just as often as you used to go there to have photocopies made.

If you had taken the time to look a little wider at the available technologies when you were buying your photocopier, you would have discovered that almost every fax machine on the market provides the option to copy your documents as well as fax them.

The same holds true for many other functions on the modern fax machine. Functions such as answering machine capabilities, connection to personal computers that allow a fax to act as a printer and even computer scanning capabilities are now commonplace on fax machines in the \$600-\$1000



Is it a fax? Is it a copier? Or a colour printer? Toshiba's new 'personal image processing system', the TP401 system, is all three. In the UK it sells for £249, plus Vat

range. These devices must therefore be considered not only on the basis of your existing needs but also on what you expect that you will need to do in the near and medium term.

Of course the usual caveats apply. If, for example, you foresee regular requirements to be able to send faxes and print documents simultaneously, then having those functions combined in a single piece of machinery is unwise. Likewise, reliability of service becomes more vital in the event of system breakdown: you'll face the loss of your printer, copier and answering machine in one go.

There are also a few other technical considerations. The first involves quality of output: the cheapest fax machines use thermal fax paper on a roll. This paper is usually thin and tends to maintain its "curl" for a long time after leaving the fax machine. This can be particularly problematic if you intend to use the fax machine for photocopying documents that you need to distribute to clients as it looks exactly what it is - a cheap fax.

A better bet for anyone concerned about the look of the final output is plain paper fax systems - which commonly use inkjet technology for output. For many, this represents a good compromise between laser quality and the cheapish look of thermal fax paper.

Plain paper fax machines that use inkjet technology for their output are often a little slower than thermal paper fax machines, but they do give you output that is close to laser quality - at a price that is still well below the \$1000 mark.

A good example of this are two new multifunction fax/printers from Hewlett-Packard in the company's HP OfficeJet Series 300 range. HP says the new products integrate the common office features consumers want most - full-featured printing, faxing, copying, and scanning.

HP says it has designed the new products for people who want to take work home from the office, telecommute a day or two a week or run sideline businesses from their homes.

HP says the new OfficeJet Series 300 can print documents at up to 3 pages per minute and offer 600 x 300 dots-per-inch (dpi) resolu-

tion. Both new products provide plain-paper faxing with enough memory to allow 24 pages to be stored if the device runs out of paper or ink. The machines can speed-dial up to 60 locations. They also have newly designed front panels with 10 one-touch keys that make it easy to send faxes to frequently-dialed numbers.

The OfficeJet model 350 printer-fax-copier-scanner is equipped with a 300 dpi scanner for convenience scanning and copying of text, line art and signatures. It also comes bundled with Caere OmniPage Limited Edition optical character recognition (OCR) software to allow people to edit documents that have been scanned into word processing applications.

HP is not, of course, the only supplier of such devices. Brother's sub-\$900 MFC-1750 plain paper multifunction machine offers 200 x 400 dot per inch resolution, enough built-in computer memory to store 10 pages even when the machine has run out of paper (and then print them out when paper is added) and the capability to print from a computer at two pages per minute.

Availability and cost of "consumables" need to be considered. If you choose a thermal fax machine, for example, look for one that uses a standard roll size and the maximum possible "core".

Machines that can only use fax rolls with a smaller core can hold less paper before they need to be refilled. Likewise, check out how many pages a plain paper fax can print before it needs to be reloaded with a new ink cartridge - as well as the cost and availability of the ink cartridges themselves.

Finally, weigh all this against the performance of similarly-priced single-purpose machines. If you need a high-quality scanner, for example, you would probably be better to go with a single-purpose flatbed scanner.

■ Printers ■ By George Black

## Price war intensifies

Printer prices continue to fall as leading manufacturers concentrate more on sales to the home office user

The spread of the printer from the large corporation to the small business and the home office has greatly changed the market in the past couple of years. In the UK, for example, printer prices for low-end models have fallen even through the £150 level.

The home user tends to place less importance on the power and versatility of the machine and more on low cost of ownership, ease of use and reliability.

But high quality of output is what such users want most of all, according to Mr Peter Turner, UK managing director of Oki Systems.

Oki commissioned market research into the requirements of the small business sector before designing the laser machine which it launched into the market in May.

"They want the printed page to look as good as if it came out of a printer in a large company's office," he says.

Some users want to be able to print one or two pages quickly, but speed of output is not as important to them as to the large business user because the volume involved is usually less, notes Ms Lucy Pedrick, an analyst at market research firm Rometec.

The typical SoHo (Small Office/Home Office) user buys a machine which prints at four to six pages per minute, compared to the corporate office laser which prints at 12-16 pages a minute.

Jetset prices have almost halved in the past five years and users now get very much more for very much less money. Prices have fallen from £300 to £250 and less in just the past year, as manufacturers have concentrated more on the SoHo sector.

Lasers now cost around £300-£400, but they may be cheaper to run than inkjets, which cost more on colour cartridges and may need more expensive paper.

SoHo users have so far proved willing to pay only a little extra to have colour rather than monochrome. Most therefore buy colour-capable inkjets - those which can take a colour cartridge as well as monochrome - rather than the more expensive full-colour models.

They tend to be more concerned than other users not to have technical difficulties. An on-site repair warranty may therefore be a crucial part of the deal.

Lessors generally produce noticeably sharper print than inkjets, but some users want both sharp print and also the occasional use of colour. Vendors say that some of these SoHo users now have two printers in their home offices for different purposes.

Leading vendors sell to SoHo users through small dealers, computer superstores, electrical warehouses, high-street electrical stores, computer stores within department stores and mail order coupons in technical magazines.

Hewlett-Packard dominates the SoHo sector, as it

does the market as a whole, but its lead is less solid there. "The awareness of the HP name is not so strong among home users as in big companies," claims Rometec's Ms Pedrick. "Many home users who have not worked in big companies may know the name of Canon better than that of HP."

A number of other manufacturers are targeting the SoHo sector as their best opportunity of taking sales away from HP. Even fiercer price competition is likely among the laser manufacturers, with prices falling perhaps towards £200 in the next year or two.

Users are likely to be offered 8-10 pages per minute for the same price as older 4-6 ppm machines. But Mr Malcolm Hancock, a senior analyst at Dataguest, says that price competition makes it very hard for many manufacturers to keep in the race, especially in inkjets.

Around 60 per cent of the printers sold in Europe in the first half of 1996 were inkjets. Inkjet technology is owned by only a few comp-

Continued on facing page

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Working from home: international comparisons in teleworking/telecommuting. By Geoffrey Naim

## Televillage is a European showcase

By the year 2000, there may be 55m teleworkers worldwide, although resistance to the concept remains high in some areas of Europe and Asia

Nesting in the Ligurian hills above the Italian Riviera is Colletta di Castelbianco, a long-abandoned medieval village whose peace will soon be disturbed by the gentle hum of Web servers and the clatter of keyboards.

"Televillages" are rare in Europe and the Colletta project has been set up to showcase the latest telecommunications technologies and

demonstrate that telework is feasible outside North America. Europe has 1.28m teleworkers and 5 per cent of European organisations allow employees to work from home, according to a 1995 survey by Empirica, a German firm of analysts.

The arrival of the Internet, better telecommunications infrastructure and changing views on employment have helped stimulate interest in

and we are still lagging behind the US," says Madrid-based Barrera.

Nearly half of Europe's teleworkers are in the UK, according to Empirica, and teleworkers make up 7.4 per cent of the UK's white-collar workforce. France is close behind with 7.0 per cent, while Germany achieves 4.9 per cent.

Move further south, however, and the picture changes. In Spain, teleworkers account for 3.6 per cent of white-collar workers, while in Italy the figure drops to just 2.2 per cent.

Italy thus seems an unpromising location for a televillage, but the promoters of Colletta are keeping the village small and exclusive to attract an upmarket clientele of self-employed professionals who can choose where they live and work.

Italian telephone company Telecom Italia is installing a 155 Megabit-per-second fibre optic network to link the 65 buildings in Colletta and give its future inhabitants a wealth of services.

All homes will be fitted with Integrated Services Digital Network links and the village will have its own digital PEX, intranet, dedicated high-speed Internet connection, voice mail, fax and

video servers. Computer company Acer is supplying the server hardware.

Colletta has its own Web site (<http://www.colletta.it>) and deep-pocketed teleworkers who fancy this beautiful but isolated part of northwestern Italy can peruse the architect's plans online and choose their future home. The painstaking restoration will not finish until 1999 but the first lots have already been reserved.

Similar schemes have sprouted in other remote regions of Europe, such as Wales and the Scottish Highlands. Developers hope to woo jaded city-dwelling professionals with a better quality of life and sophisticated telecommunications that allow them to run their studio or office from their home besides a Scottish loch.

### 'Hot-desking'

This is the popular image of telework, but analysts say these self-employed professionals represent just a small part of the teleworking market. Increasing corporate enthusiasm for flexible working practices, such as "hot desking", has obliged many salaried workers to spend less time at their desk and more time visiting clients or working from home.

A growing number of jobs that traditionally required a desk, an office computer and a full-time presence can now be accomplished by teleworkers, at significant cost savings to the employer.

Advances in computer and communications technologies have made this possible and the IT industry is, not surprisingly, one of the keenest fans of teleworking.

"More and more people working from home need to access corporate networks," says Toon Bouten, European vice president for consumer business at Compaq. Remote access software gives teleworkers the ability to dial into their company's LAN from a home or portable PC and access its resources, such as printers, databases or e-mail server.

Market analysts at International Data Corporation, IDC, estimate the European remote access market will grow rapidly from \$40m in 1994 to nearly \$250m in 1999. Mr Bouten sees ISDN as a key technology for teleworkers. They can remotely access corporate networks and download large files much quicker than using a conventional phone line.

ISDN also provides faster access to the Internet or cor-



Portofino, overlooking the Ligurian Sea: even in small towns and villages, the Internet is stimulating interest in teleworking

porate intranets, but it can be difficult to get an ISDN line working reliably and most teleworkers will need the support of their company's networking guru.

Telephone companies have, in many countries, reduced the cost of installing and renting ISDN lines (see report below by George Black), but ISDN-compatible equipment still remains pricey. To address this problem, France Telecom earlier this year ran a campaign that gave new ISDN customers rebates on ISDN cards for PCs and other equipment.

Next year, Compaq says it will include an ISDN interface in selected PC models. Another important teleworking technology is videocon-

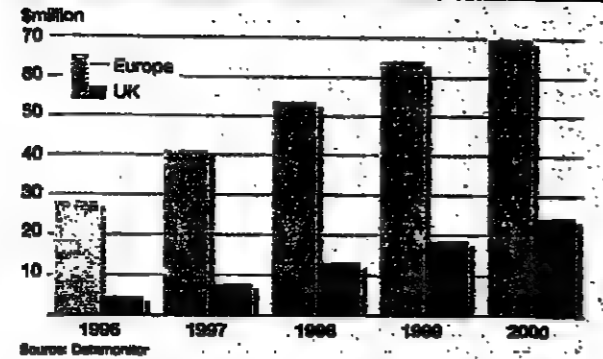
ferencing, which experts say helps overcome the isolation teleworkers can feel.

Traditional videoconferencing systems require a costly interface card and ISDN link, and are beyond the reach of many teleworkers.

"The issue with videoconferencing was always its price," maintains Bouten, who says Compaq will include low-cost videoconferencing technology in certain personal computers next year.

This technology works over standard phone lines and, according to Bouten, should only add about \$200 to the price of a PC. An even cheaper option is Internet-based videoconferencing: the software is free, but picture quality is poor.

ISDN desktop systems in SoHo market



Using the Internet as a means of delivery could make videoconferencing as ubiquitous as the phone or the fax. The installed base of desktop ISDN video systems in the European SoHo market will be worth more than \$600m in the year 2000

## New inkjet colour printers

Continued from facing page

Others have to buy it in and re-package it, which is hard to do at a competitive price, says Mr Hancock. Some inkjet owners are unwilling to sell on their technology to other vendors. Those who buy in are likely to be a year behind.

Apple is said to be the only company which is successfully re-selling inkjet technology on the strength of its own brand name. Most of these sales are made in conjunction with sales of its PCs, which the company has been struggling to maintain recently.

It is hard for lesser-known brands to gain space on the

shelves of retailers, which usually will not stock more than half a dozen makes. Unless customers start to ask for a new name and those machines move quickly off the shelves, newcomers cannot make the breakthrough. All this means that the inkjet market does not look on the verge of opening up to many more manufacturers.

### Challenge

Developments in the use of colour could help HP and Canon to withstand the challenge. They have introduced new inkjet machines which are capable of generating photographic-quality colour.

The aim, according to Canon's product development analyst Mr Julian Rutland, is to take advantage of the spread of digital cameras and Photo CD technology to enable home users to produce their own illustrated documents, such as brochures, newsletters and Christmas cards.

Up to now, most colour inkjets have been too slow to cope with volume production of full colour literature, although they are useful for inserting a few colour images into a document to enhance its impact, but as the speed of inkjets continues to improve, they could soon become much more capable of handling such a task.

Demand for ISDN: Integrated Services Digital Network. By George Black

## Internet pushes ISDN into the home

In Germany, ISDN is already a household word among the growing army of home office workers

The fast-growing interest in the Internet is creating demand for digital telecommunications in the home office.

ISDN (Integrated Services Digital Network) has started to be installed by home workers as a means of accessing the Internet more efficiently than using a modem to connect their personal computers to analog telephone lines.

Gathering information from the Internet requires a lot of bandwidth, especially when complex graphics and images are involved. ISDN is

much more capable of providing that bandwidth than conventional analog communications. Faster throughput of data also cuts the duration of calls and their costs.

ISDN could enable SoHo (small office/home office) workers to operate more efficiently, with separate lines for the PC and fax machine, and for personal and business calls. It is equivalent to having a small switchboard in the home or a direct dial in (DDI) service.

Recent market research by NOP Research Group suggests that Internet users for

business are starting to migrate from modems to ISDN. But in the UK the pricing of ISDN and general ignorance of its potential benefits have so far combined to prevent most SoHo workers taking it up, according to Mr Nevill Florey, marketing manager for communications specialists Racal Data Group.

"Most self-employed people have never heard of ISDN," he says, "and most of those who have heard of it find it is still too expensive". ISDN usage has grown faster in the UK than in other

European countries in the past couple of years, but mainly among larger companies.

The high prices, especially for installation, charged by British Telecom have been a deterrent to the SoHo user. BT has recently announced a move to a tariff structured similar to the one for mobile phones, with different installation, rental and "free" call times for different services.

The best deal for the SoHo worker may be the start-up service proposed with a £199 installation fee, £265 annual rental and £105 in free calls

for two years. BT's ISDN business development manager Ms Emmanuelle Slary says that the cut from £400 to £199 in the connection charge will increase the number of SoHo users dramatically, even though there are higher charges for line rental - "it should help small businesses, which face cash-flow problems, by spreading the cost over two years," she says.

Mr Keith Mallinson, an analyst with Yankee Group Europe, supports this

Continued on next page

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## Directions: new media

FT-IT 7

## DVD systems

## New 3-D worlds, just a click away

Continued from page 6

aging director of Global Beach. "A key feature of the Porsche promotion is that users can install the program with just one click: the software does everything else."

As communications technologies improve, the Internet will become a powerful medium for not only interactive advertising but also in accessing business information in new, and possibly more effective ways. Technologies such as the Moving Worlds Internet standard provides 3-D worlds through which the user can move around in a virtual space.

Originally promoted by the pioneering graphics workstation company, Silicon Graphics, Moving Worlds has attracted widespread interest and support from more than 80 companies including Netscape, IBM and Apple Computer. Silicon Graphics is offering web site development tools that allow companies to create web sites based on Moving Worlds.

## Advantages

Pointcast, with its multimedia network that broadcasts news, features and interactive advertising to users, is another innovative use of the Internet. A key advantage of Pointcast is that much of the graphics and animation files are downloaded once, allowing the company to save bandwidth by sending out updates rather than the whole package. Corporations can also set up their own private Pointcast networks sending multimedia data to staff over their intranets.

Soon, as Internet, DVD and other PC technologies continue to merge, users will not really know exactly where the multimedia content for their business or entertainment applications is coming from.

## Converging products and services

By Geoffrey Wheelwright

## Users baffled by range of options

With rapid advances in IT and new media, potential users are unclear about what systems will really deliver

It is almost trite to talk about technology convergence in today's business environment. It is everywhere - with computers that fax, fax machines that have computer memories, new telecommunication services, television deals that spawn online services, movies with World Wide Web tie-ins... and the list goes on and on.

The danger in all this convergence is that ordinary consumers - whether at home or in business - find themselves bewildered by what is on offer: sad stories abound throughout the information and communications industry about how it is falling wide of the mark in educating potential users about its converged products and services.

Consider the story of the company that organised a "focus group" to show off its new system for accessing the Internet's World Wide Web through a TV set. One by one, people were brought in to see the system and shown how to use the remote control to "surf" from page to page on the Internet.

Smooth-talking advertising types ushered a New York construction worker into a demonstration booth and showed him a Web page with all kinds of sports information. They explained how it worked - then retreated behind a two-way mirror to watch how their visitor used the system.

They waited as the construction worker just sat and stared blankly at the screen. After ten minutes, an organiser went into the room and asked the visitor why he wasn't doing anything - "I'm waiting for the movie to start," he replied.

This response is a classic example of how technological convergence needs to be accompanied by clear explanations to users about exactly what the technology will really deliver. The user, in this case, had no idea that he was not dealing with a passive medium, such as television - after all, the service was being delivered via a TV set.

It is against this backdrop that converged devices such as the \$299 Philips Magnavox WebTV was launched in the US recently. WebTV is

designed to be an easy and cheap way to use the Internet and World Wide Web, using a small device hooked up to a standard TV. And it comes via a consumer electronics company that carries the pedigree of having successfully co-introduced (with Sony) the compact disc to the world - and it uses software from an independent company, called WebTV, to do it.

The WebTV box looks like a small desktop computer without a monitor. It plugs directly into a standard TV set to give users access to the Internet. According to PCEd senior vice president Ed Volkwein, there is high demand for easy access to the Net through any TV receiver and standard phone lines.

"Our research shows that while US consumers have a general awareness of the Internet, the cost of hardware is perceived to be prohibitive," he says. "Consumers want accessibility to the Internet without investing in a home computer... they want to experience the Net in the living room, at an affordable cost."

Surveys show that parents think Internet access would be "a great way for their children to complete projects for homework," he adds.

But there is some concern about access to content they feel might be inappropriate. Philips has a built-in "parental control feature" in WebTV that is supposed to limit access to Web pages that are inappropriate for children. The WebTV system also features a "Kids' lock," which children can use to "take interactive field trips, access reference resources, and other youth-oriented features."

The Philips WebTV marks the first test of the low-cost "Internet computer" concept from a leading consumer

electronics company and will be watched closely by competitors throughout the Christmas season.

But according to Michael Goreman, a partner with the New York-based management consultancy, Mitchell Madison, the trend toward convergence is "heavily over-blown" - particularly in the media market. He suggests that technology has instead led media markets to fragment and diverge.

Media market participants need to maintain a strong focus - "rather than throw everything in the pot" in pursuit of the opportunities that a converged market supposedly offers.

The key to profitability in

## 'Media market participants need to maintain a strong focus'

the media sector is based on seven principles, he believes. "Focus on one medium at a time and don't over-estimate synergy [between media]; aim for leadership in your core market; consolidate your position in a media category; target vulnerable leaders; invest for the long haul; make it affordable; and expect declining market interest over time."

Ironically, it appears that one of the biggest representatives of the "convergence" trend is following much of this advice. In its recent announcement of a variety revamped Internet online service, software giant Microsoft presented many of the same ideas for the future of MSN, the Microsoft Network. The company is describing the new service - which resides entirely on the World Wide Web - as a chance to "redefine what it

means to be online."

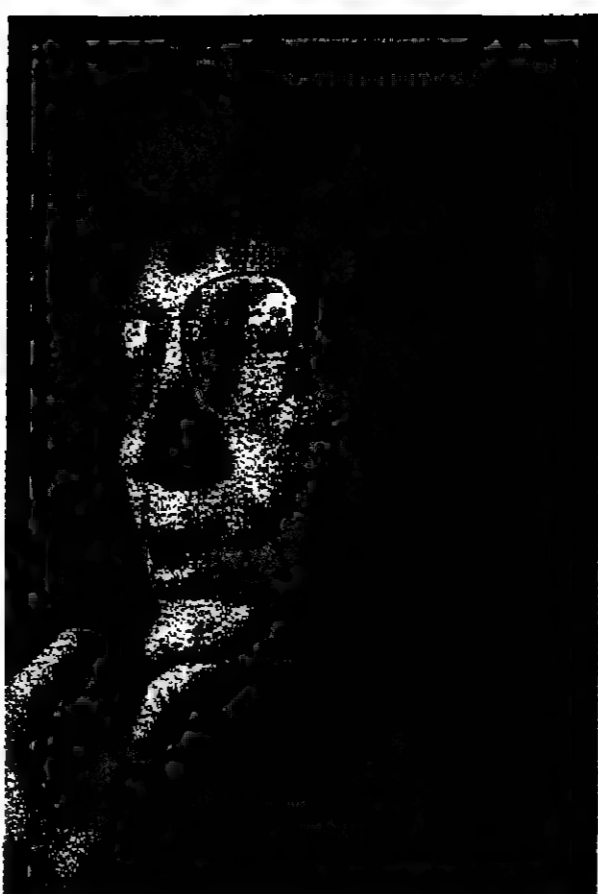
Part of the Web content is available free to all Internet users, with the rest requiring the payment of a monthly fee to be a full MSN member. As part of the content for its members' service areas, it has introduced a new TV-style concept, called "Web-shows". These original presentations are divided throughout six different channels and Microsoft promises "they will offer a completely new Internet experience for people with different interests and lifestyles."

In addition to a big range of originally-programmed Web-shows that will make their debut with the new service, other OnStage features include news from the jointly-programmed MSNBC venture with NBC television and a subscription to Michael Kinsley's Slate political magazine.

The nature of MSN's Web-shows range from the low-brow "15 Seconds of Fame" (which gives members a chance to offer their stories about 'memorable' life events, such as "the first time I got drunk") to more philosophical shows such as "Retrospect 360 Degrees", designed to offer a multimedia view on topics such as "history of the future".

Microsoft is putting a lot of resources into the Web-shows and is commissioning a great deal of new material from third-party producers in an effort to boost non-Microsoft content. This is shown by the inclusion of shows such as Star Trek, Continuum and Entertainment Tonight on the MSN service.

In addition, MSN also announced a new pricing structure that includes what Microsoft calls the "MSN Premier Unlimited" plan that offers unlimited access to the Internet for \$19.95 a month. There is also a new



Bill Gates on bringing new products to market: "We have enough money in the bank - and money comes in every day, so we can afford to do things on a long time-scale"

Premier Monthly plan for \$6.95 a month that includes five hours of usage - which Microsoft claims will give it price/value leadership among all online services.

Microsoft says that it does not expect to make money on the service for at least three years - and clearly takes a long-term view of the entire Internet online services market. Microsoft believes there will be as much as \$15bn in annual revenues generated on the Internet by the year 2000 - and it is aiming to win 10 per cent of that business.

Once again, there is a very different business model - people should be very conservative, looking at us and other interactive media technologies in terms of profitability," says Microsoft chairman Bill Gates.

"Early investors will do very, very well. As to whether Microsoft is now a media company - yes, we are doing media things, such as hiring writers, artists and graphic artists, but we haven't chosen to get into traditional media. However,

as part of a partnership, sometimes we might end up being an equity owner in something that has that [with MSNBC being a good example].

"From a percentage point of view, you won't see them shifting our industrial code over to the media category this side of the millennium. We are a company selling more than \$80n worth of software. And the PC business and server business is growing as we are able to use the Internet to deliver the content and have a relationship with the customers," he says.

One of the key constraints, he adds, "is how fast they can bring in great new people - but we have enough money in the bank and money comes in every day, so we can afford to do things on a long time-scale. We are investing many hundreds of millions of dollars a year in this."

Focus on educational software and the computer games market: see reports on page 13

## Book review

## Impact of IT on law reform

*The Future of Law*, by Dr Richard Susskind; Oxford University Press, 1996 (ISBN 0-19-826007-5); h/b, £19.99

Dr Susskind's book - probably the first significant appraisal of the possible impact of IT on legal practice and the administration of justice - has two audiences.

Firstly, it is aimed at an overt professional audience, defined by Susskind as "lawyers and members of the legal profession".

Secondly, and more importantly, Susskind hopes to appeal to a new audience: a wider one with, as yet, vaguely-defined roles emerging from the convergence of information technology and the law.

Susskind says simply "the practice of law and the administration of justice will be more radically affected by IT than by any other single factor of which we can be aware today".

Those who will be involved in this process of change - what amounts to a "re-engineering of law and how it used" - comprise the second audience that Susskind identifies.

## Opportunities

The emergence of a new kind of "legal service provider" to challenge traditional lawyers is an example of the new opportunities Susskind sees. He suggests this will happen within the structure of a re-engineered legal system where lawyers are sources of information, service providers package, market and distribute legal services and solicitors' clients become "users".

He believes that increasingly legal services will cease to be the preserve of established legal firms and

Continued on page 12

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## ■ 'The Intelligent Island'

## Technology underpins Tiger's hopes

The city-state's vision is of a high-tech society where knowledge flows freely

FT  
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International focus:  
Singapore

Michael Dempsey reports from 'The Intelligent Island'

The angular giant that is United Overseas Bank sits on the south side of the Singapore river, opposite the Empress Place building, an elegant relic of the imperial era.

A huge bronze bird, a monumental sculpture by Fernando Botero, dominates UOB's forecourt. In case visitors fail to grasp the significance of the bank's location, a symbol of independent prosperity in the face of a flawed past, the UOB bird carries a plaque proclaiming the power of optimism.

"Among the booming Asian Tiger economies, the city-state of Singapore is unique. A population of 3.2 million occupy an island the same size as London within the M25 corridor. Like the urban nations of the Italian Renaissance, Singapore relies totally on trade. It has no natural resources. Practically the entire city has been rebuilt over a mere 20 years and exudes absolute optimism."

This is an attitude the government is happy to see in its population, but it has no intention of leaving future success to fate. The government is painfully aware that today's economic prowess could be swiftly eroded as

neighbouring nations aspire to tiger status.

As part of an aggressive policy of maximising all economic resources, it has become the first government in history to focus on knowledge management as a tool of economic status. A healthy respect for *laissez-faire* capitalism is not allowed to stand in the way of intervention, when appropriate.

'IT 2000' is an ambitious \$620m scheme that involves pump-priming dozens of IT companies and underwriting



Computer systems at Singapore's International Money Exchange, Smeex

key projects. The aim is to create a society where information flows freely and departments of state work in concert with private industry through paperless communication. This vision is frequently called 'The Intelligent Island'.

The grand plan, pursued by the National Computer Board (NCB) through eight clusters, centred on economic and user sectors, is envisaged as part of everyday life. The blue cars of Singapore's Comfort Cabs Company have begun to sprout radio receivers for the global positioning system pioneered by the US military. Local software house Knowledge Engineering received a \$377,000 government grant towards creating a \$630m fleet management system. This uses a geographical database of the island's roads system and lays taxi positions, constantly updated by the satellite-based GPS signals, on top of road routes. Dispatchers summon up the address of callers and look for the

little blue cab icon that is nearest to the customer.

The system, due to roll out in 10,000 cabs, has irritated the trial drivers: they complain that passengers are accustomed to cabs turning up 15 minutes after they phone, and a GPS-equipped driver who promptly arrives in under five minutes usually has to wait for his fare to get ready.

## Local skills

Companies queuing up to contribute to the intelligent island include the French software house, Ilog, (see profile, page 12). Ilog's local manager Mr Bounthara Ing believes that Singapore and its near neighbours will follow their own route in the information age. "Look at the way Asia has caught up: it's not been by using unique technology or different chips, but by making use of packaged technology. The real advantage has been in the skills of the people."

Asia's economic growth has created consumers, as

well as producers. In regional terms, Singapore is an expensive business location, but companies such as IBM and Hewlett-Packard manufacture systems there. Political and social stability combined with an educated and motivated workforce are building Singapore into a regional hub for far-sighted IT concerns. China remains the big prize, but activity can be co-ordinated from Singapore.

Ilog's Chinese University programme involves giving away software in order to foster a long-term market. Mr Ing admits that under the present climate systems that are not donated might be pirated anyway. But Ilog is giving \$31m worth of software to an academic programme based at Huzhong University. The staff at Huzhong will recruit other institutions into a scheme to present industry-related products using Ilog's software development environment.

The NCB promotes ambitious projects with vigour



The export of electronic components is crucial to the economy

and funding. But dollars alone are not the key to success. Singapore's love affair with IT-based productivity enjoys serious political backing. The semi-official *Straits Times* frequently leads with the speeches of government ministers, such as environment and defence minister Mr Teo Chee Hean, extolling the virtues of multimedia networks and smart cards.

This drive for IT supremacy has not all been plain

sailing. The arrival of the Internet in a society where rigorous official control is a fact of life has created problems. "A balance must be struck between free access to information and the need to maintain the values of society," was prime minister Mr Goh Chok Tong's observation on the information superhighway.

The government has announced that regulators will scan Internet sites

related to politics and religion, partly in an effort to block any attempts to incite racial hatred in a multi-ethnic society.

Up to 10 per cent of citizens regularly use the Internet, with 100,000 accounts opened so far. Singapore Telecom is expanding its data transmission capacity aggressively, and with 20,000 households connected every month, the Internet can only become more popular.



The port of Singapore. Mr Bounthara Ing, pictured left, of Ilog, says: 'Our real advantage is the skills of the people'

## ■ Computerised Port Authority

## Harbouring even larger ambitions

The largest single container operator in the world is using IT to maintain its position

As passengers flying into Singapore are greeted by a startling illustration of the island's trading status: hundreds of container vessels moored in the Straits, waiting to enter the port.

The Port of Singapore Authority handles 400 vessels every day. Mr Eric Lui, a former marine engineer who moved into IT in 1981 and now directs information systems for the PSA, is responsible for finding new ways to squeeze extra value out of this huge operation.

Mr Lui's world is dominated by the container industry metric of Twenty Foot Equivalent Units, or TUs. A 40ft-long container counts as two TUs, and ports are rated in terms of the number of TUs they process.

The PSA claims to be the world's largest single container operator, with 21 million TUs processed in 1995. Arch-rival Hong Kong matches Singapore's productivity, but only through the efforts of three separate operators. The PSA anticipates handling 16 million TUs a year as it maintains an annual growth rate of around 10 per cent.

The port is the key to Singapore's status as a financial and logistics centre. Transshipment, shifting containers from large bulk carriers on to smaller vessels for regional delivery, is its core activity.

A huge proportion of goods moving between Asia and the West passes through the PSA's hands. Mr Lui knows that competition for this lucrative trade can only become more intense. "We are fighting hard to maintain Singapore as the world's number one port," he says.

## Activity

From the sea, the high-rise business centre of Singapore is obscured by a forest of cranes lifting and shifting containers. This frantic activity is co-ordinated by 28 planning staff. With around 400 cranes active on the quays, movements have to be limited and planned meticulously to avoid collisions and blockages. Ten years ago the PSA employed 35 planners, but they only handled 2m TUs.

The PSA's first venture into advanced software began in 1986, as it struggled to manage an explosive growth in traffic. It wrote a knowledge-based system, incorporating the professional expertise of its planners, but the KBS school of software proved inflexible in a constantly shifting environment.

The PSA turned to software building blocks from Ilog in order to boost the productivity of its in-house developers. The idea was to equip them with programs that would promote the creation of small, local working routines. "Ilog's contribution is to provide a tool that allows our developers to put various forms of logic into use. The programs that result can help to increase productivity," says Mr Lui. "We wanted to write software that would send crane operators in the right direction, generating instructions to treat bottleneck areas of a ship by allocating that job to the most experienced crane driver."

The PSA has implemented four suites of planning software, addressing ship, yard and berth planning with an integrated dynamic planning system. Development costs amounted to around \$10m. One Stratus fault-tolerant computer sits at the heart of the PSA's planning section, in an air-conditioned block decorated with outstanding performance awards. Pride of place belongs to a citation for 229 container movements from one Danish Maersk Lines ship inside one hour, in July 1997.

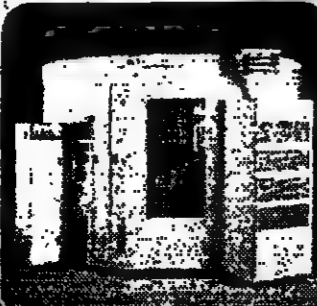
A bank of screens shows shipping data and live closed-circuit TV images of activity on the quays. Each screen running the planning

Continued on facing page

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## IT in Asia: Singapore

FT-IT 11

## Strategy for a networked society

## Wired for growth

Government aims for mass access to keep city-state competitive in 21st century

Puppets boxing each other's shadow are a feature of traditional plays in parts of Asia. Stephen Yeo, chief executive of Singapore's National Computer Board, thinks they bear a useful message for state bodies tasked with promoting industrial activity.

"If government lacks the will - and support for IT is just words - we will all be wasting our time," he says.

"We want to avoid shadow boxing, so we're very forthright with industry. We share information as much as possible. In a word, it's all very straightforward here."

Yeo is the NCB's fourth director in 15 years. Oxford-educated and relaxed, he is acutely conscious that the NCB is only one component of Singapore's future economic growth.

The NCB owes its existence to what Yeo describes as a "unique situation".

Government intervention was required to get started the raft of programmes that constitute the IT 2000 initiative (see *factbox* page 12). The NCB has allocated \$200m for IT 2000, but most of its budget comes from government departments. Yeo says 75 per cent of the infrastructure to create a "paperless economy" is now in place. Cable connections capable of handling digital data are going into 20,000 addresses every month.

## Key target

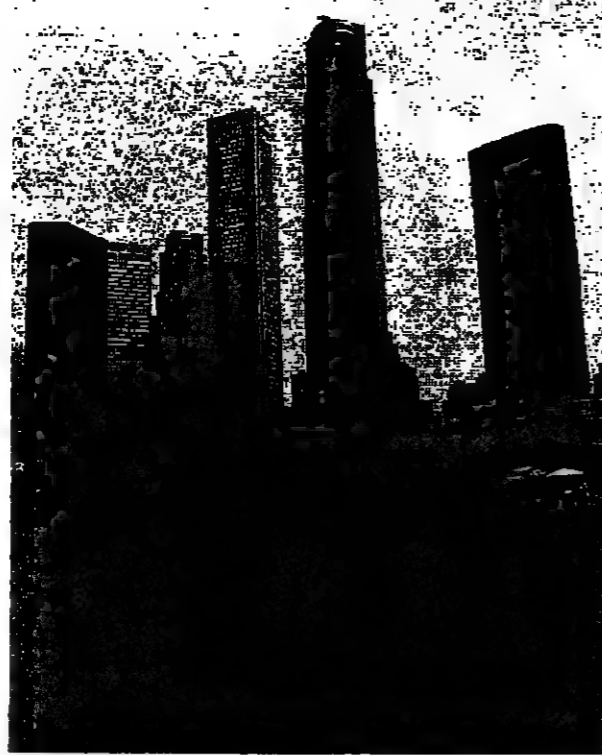
As government ministers, eager to encourage citizens to think in terms of Internet access, have pointed out, these connections mean more than cable TV.

"We're talking about wiring up 800,000 homes in Singapore," says Yeo.

The Housing Development Board's blocks of apartments or "flats" where most Singaporeans live, are a key target. The cream-coloured blocks, startlingly clean by the standards of much Western public housing, feature a communal ground floor that the NCB wants used for mass computer access.

Yeo joined the NCB in 1981 from Singapore's Defence Ministry, where IT in command and control in air defence systems was his main concern - with an objective little different from the IT 2000 brief.

With full employment and a booming economy keeping



Singapore's financial district; the city-state has recently been voted 'the world's most competitive nation'.

Picture: South Murray

the small population busy, Singapore's military faces the same difficulty as every other enterprise: how to maximise human resources.

As a reserve artillery officer liable for annual call-up, Yeo is expected to stay abreast of tactics. The army now uses computer-based training reducing demands on professional instructors at a new military academy where every officer cadet has a computer terminal by his bunk.

This urge to adopt leading-edge techniques might be mistaken for a vague. But behind the startling facade of Singapore's economic miracle lies a fear that other nations may be about to repeat the trick.

"We used to produce half the world's disk drives, then we saw factories opening up in Malaysia and Indonesia," says Yeo. "Our position in that market was no longer tenable. So we started encouraging investment in wafer fabrication plants. We face a constant drive to move into new areas."

Semiconductor exports - which make up about 80 per cent of Singapore's non-oil exports and are seen as a barometer for the electronics sector - climbed by 1.7 per cent in October, after two months of declines.

Singapore, recently rated the most competitive nation on earth by the World Economic Forum, intends to keep its poll position. IT 2000 should increase its attrac-

tiveness to outside investors. Yeo emphasises that Singapore intends to be more than a convenient port halfway to Japan.

"Our vision is that local companies and multinationals can use Singapore as a test-bed," he says. "We're small and manageable and from Singapore you can project into the whole region."

Singapore's cost-base, with high wages, dictates the terms on which it competes - "we can't make a living out of being programmers. Look at India: in one year they turn out 25,000 graduate programmers. It took Singapore ten years to develop a pool of this size."

## Multinationals

Instead, Yeo foresees a strategy of working with multinational corporations to bring R&D facilities to the island. One such venture is Singapore Network Services which provides an electronic document-handling system that processes 90 per cent of such material in Singapore.

It was spun-off from the NCB in 1989 with a mission to cut the three-week approval process that dogged trade agreements at that time. Its electronic exchange reduces the time taken to 15 minutes. Singapore's refusal to rest on its merits means SINIS has now been charged with cutting the 16-minute time-frame down to a matter of seconds.

Yeo's business card sports the NCB's new logo: blue ripples spreading out over a pool - "most people see technology as a crashing wave," he observes. "We want it to be something that is quiet and gentle, but is still felt by everybody."

## Innovations at Changi Airport

## A pivot for Asian business

New software helps to speed up passenger services

Beyond the door marked 'Apron Control' at Singapore's Changi Airport, lies the world's most sophisticated parking lot. A huge picture window opens on to the tarmac of an airport that handles 450 aircraft movements, most of them large planes, every day.

The hulls of Singapore Airlines Boeing 747s rise over each pier housing the passenger gates. Apron Control is very much in touch with the outside world. Those areas of the airport that are not visible from Apron Control's windows are caught on closed-circuit TV monitors that constantly scan cargo-handling activities.

The assistant apron superintendent, Mustafa Othman, and his colleagues, do not have too much time to spend admiring the view. They

must allocate gates to incoming aircraft, trying to reconcile the flow of incoming passengers with baggage carousels and aircraft turnaround times. Until recently, this was a labour-intensive task involving paper charts and coloured diagrams. That was until Changi implemented its \$81.5m Intelligent Gate Management System, or ITGMS.

Knowledge Engineering, a \$33m 14-strong local company won a \$5180,000 grant from the Singapore government to develop a luggage belt allocation system for Changi. But this grew into a larger project that reflects Singapore's status as a pivot for Asian business.

Ms Lim Kwee Ean, who founded Knowledge Engineering, wrestled with the challenge of writing software that could be trusted to manage a huge part of the operations at an international airport.

"We had to use constraint-based programming, employ-

ing software that worked by certain rules. We needed to start out by looking at what we had to achieve, setting out clear goals such as 'how far should passengers have to walk to get their baggage?'," Ms Lim recalls.

Changi Airport wanted to make as much use as possible of fixed gates, the covered gantries that marry up with cabin exits. If most aircraft can be allocated a fixed gate before landing, then the practice of bussing, which is unpopular with passengers, can be reduced or even abolished.

Ms Lim has worked as an 'artificial intelligence' consultant for ANZ Bank, putting expert systems into use. But the notion of expert systems, embodying the professional experience of the customer's own staff, does not suit a rapidly changing situation where decisions must be taken in real time, she says - "with gate-allocation, you don't just pick one flight at a time and deal with



Airport briefing: Mustafa Othman, right, explains the new, streamlined system to Michael Dempsey.

that. The end-result should be that you're dealing with every flight that day."

Knowledge Engineering wrote a program for Changi that condensed a daily three-hour planning session into ten minutes. What Ms Lim terms a 'constraint processing engine, a software routine that embodies the real world response of Changi's Apron Control staff, was the core of this system. But Ms Lim and her colleagues had to learn just what drove the working day of Mr Othman's team before they could devise a replacement for the paper sheets that dictated where aircraft parked and how baggage was distributed.

Initially, Mr Othman retained a professional scepticism about the chances of a computer program replacing the charts and shaded boxes that kept Changi's runways clear. "Knowledge Engineering was not involved in the aviation industry so they were developing this system from scratch. We spent many, many hours in discussion with them."

Mr Othman now admits that his team started out with a rather wary attitude to IT "interlopers". But, in practice, Singapore's attraction to efficiency proved a key selling point. ITGMS is "very user-friendly", and at Changi, apron controllers soon found that dealing with a screen-based depiction of the airport made a difference. Opposite every active gate the system displays the outline of an airliner. "Black"

aircraft are currently loading and unloading; 'blue' outlines indicate an aircraft will arrive at that gate within 30 minutes.

ITGMS would be worthless if it worked to rigid rules. But Ms Lim's rejection of formal expert systems in favour of constraint-based programming techniques that allow variables to be fed in within chosen parameters, works at Changi.

As I watch, computer screens in Apron Control flag-up the sudden arrival of a VIP flight from the neighbouring oil-rich state of Brunei. A note from the Ministry of Foreign Affairs advising of this important but unexpected arrival threatens to wreck the day's gate allocation schedule. ITGMS shows not just those gates with VIP facilities, but can demonstrate the knock-on effect of picking any one VIP gate on every other flight.

Othman allocates a gate to the Brunei jet, confident that its passengers will receive the right services without disrupting the arrival of thousands of other people. By clicking a mouse on the outline of an aircraft, he receives data listing the number of passengers, place of origin and departure time of that flight. Putting each flight at the best gate for baggage reclaim is integral to the purpose of ITGMS: "We have a target - 13 minutes after the first passenger walks off his flight, the first bags should be rolling off the luggage carousel."

## Computer-aided design

## Drawing on new systems

Object-oriented software makes the planning process faster and more efficient

To anyone confused by the IT industry's obsession with object-oriented software, Singapore's Public Works Department offers a simple explanation.

To the human eye, the lines and curves on an architect's blueprint form shapes recognisable as walls. But computer programs only began to grasp this type of relationship with the advent of object-oriented systems. Intelligent object-based computer-aided design, or Cad, is the tool in question.

The building control division of the PWD has turned to this technology to cope with the flood of planning applications created by Singapore's rapid economic growth.

The PWD has achieved its goal of what it describes as an intelligent drawing, but this involved a journey encompassing abortive projects and IT capability stretching back 14 years. In 1982 the first Cad systems were appearing on the market and the PWD was a partner in a large US-government sponsored programme to land computer know-how acquired by Washington's Department of Energy. The PWD attempted to hitch the DoE's energy simulation program on to an early Cad system from Intergraph to automate planning

applications. Mr Wong Wei Ching, building plans chief at the PWD's building control division, explains that this project was doomed to failure. "The technology was not mature enough to do this. In the following six years we tried to automate building checks and fire requirements, but we were asking too much."

In 1991 Singapore's National Computer Board approached the PWD to participate in an initiative aimed at highlighting the application of artificial intelligence (AI) technology. At that time the frantic rebuilding that saw rows of traditional shops and houses yielding to prestige commercial development had slowed down. But a new emphasis on refurbishment of older properties meant the PWD still wanted a way to streamline the approvals process.

The Japan-Singapore AI Centre, an institute sponsored by the NCB and staffed with consultants supplied by the Japanese government, assessed the PWD's needs. It recommended software reasoning tools from Ilog to interpret building drawings. This component was a primary ingredient, but the PWD still had to add its own collective expertise in checking plans. Ilog software created the basket this knowledge was dropped into. The aim was a system that would be open to architects and designers seeking clearance for their plans.

The construction real estate network, known as Corenet, was under development at the same time. Corenet is a local area network linking computers within the PWD and allowing the

Continued on next page

## Port's efficiency

Continued from page 10

systems contains a vertical axis showing the window in time that vessels occupy, while a horizontal axis demonstrates which wharves are in use.

With docks stretching for several kilometres the PSA uses a fleet of vehicles. Its 40-strong development team has employed the Ilog program to devise a maintenance regime that reduces downtime on equipment to a minimum.

The objective is to get a technician to any piece of equipment that breaks down within 15 minutes. Every vehicle and crane possesses an onboard terminal. The driver responds to any failure by keying in a code indicating the nature of the fault. The PSA's 16-channel radio network transmits fault reports to the engineers' department.

## Schedule

Before the maintenance group got its job-scheduling system, work was done sequentially, with engineers working down a list of vehicles to be overhauled. Now the PSA generates a list of similar tasks that can be dealt with by one engineer in one go.

The PSA's IT department donned hard hats to research this system. Ms Poon Keen Pui, a systems analyst who joined the PSA straight from university, clambered up to crane operators in cabins 10 storeys above the quays. The engineering control operations system (Ecops) would only work if the development team understood every com-

ponent of dockside operations.

Crane operators, accustomed to eight-hour stints in their cabin with food hauled up from the dock by rope, were initially reluctant to adopt the PC with its wireless network link. Once the Ecops was understood as a useful tool rather than a management spy, however, it became part of the working regime.

A new quay scheduled for 1998 will have the capacity to operate unmanned vehicles. The PSA has a vision of cranes and support vehicles operated remotely, transforming sections of port management into a high-value computer game.

But despite the availability of unmanned equipment from Japan and Germany, the PSA is keeping its distance from this technology. Current figures for mean times between system failures do not impress Mr Lui. The PSA is developing its own software to replace suites onboard these machines.

The competitive pressures on the PSA remain intense. Every IT-generated advance in productivity keeps Singapore abreast of developments elsewhere in the region. The PSA, says Mr Lui, guarantees trouble-free service - "If a vessel carrying 2,000 TUs arrives here, we will turn it around in 18 hours."

The PSA boasts double the productivity of the Asia Pacific region, but its charges are significantly higher than other ports. Business will only continue to flow through these quays if the PSA remains a paragon of efficiency.

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IT in Asia: Singapore

## Computer-aided design

## Saving money in public works

Cont'd from previous page

building plans system, known as BP Expert, to join in a wider process of planning approval.

A human computer interface phase of development, testing out the proposed BP Expert with the PWD employees who would be using it in the near future, led to subtle changes in the software. The number of steps it took for a user to zoom in on one aspect of the architectural drawing was reduced while more efforts were made to ensure that BP Expert conformed to the familiar world of Windows.

Mr Wong says: "When we started on this programme we had two criteria: the outcome must be user-friendly, because we had already experienced poor user-interfaces with software from some companies. And it had to have a direct Cad interface. Systems that require human intervention to translate the planning information into a form the Cad program can understand are very manpower-intensive."

## Requirements

Singapore's Public Works Department was determined to get a system that could do its own diagnostic work. Its officers knew that most of the architects' draughtsmen producing building drawings used some form of Cad. Many Cad systems on the market, such as the current offerings from Intergraph, permit a certain amount of automation. Lines and curves can be created automatically, says Mr Wong. "We call this feature-based Cad."

The idea of feature-based Cad allows the PWD to stipulate which set of attributes belong to a material type, which in turn dictates the fire and safety regulations pertaining to that part of the building.

The US software house, Ketiv Technologies sells ArchT, a program that runs on top of automated Cad pro-

grams, for \$83,000. ArchT is used by the PWD to bridge the gap between its vision of intelligent drawings and the current crop of Cad tools.

Mr Wong intends to jumpstart the Singapore construction sector's participation in BP Expert by giving away technical specifications for the software and encouraging them to adopt systems such as Ketiv's ArchT. "In order for industry to use this feature-based Cad, we must 'usher' them in to it."

The PWD tries to deal with the private sector on a co-operative basis. A CD-ROM model of BP Expert, based down to allow architects to create an application that can be submitted smoothly to the PWD, is now for sale. The price is nominal, but represents one small effort by a public body to recover costs without trying to profit out of providing an important service.

The BP Expert program has cost \$86,750. Corenet, a far larger undertaking, is budgeted at over \$910,000. But the baseline investment in these systems means other undertakings will cost far less.

A parallel scheme to automate structural planning, SP Expert, is already under way. With BP Expert, one hotel floor plan can be fed into the system in around five minutes. Previously, this represented an entire day's work.

The new approach "gives the architects and designers a consistent, authoritative version of the different scenarios. With a copy of BP Expert running in his office, an architect should be able to check alternative designs against the combined knowledge of the PWD before submitting a plan."

Mr Wong thinks this software can replace an adversarial relationship between private contractors and civil servants with a constructive, service-oriented approach. The new method adopted by the PWD should save architects from constantly going back to the drawing board.



Half the world's disk drives are made in Singapore. Above, a technician, with magnifier, at work at Seagate Technology



Software pioneer with clearly defined goals: Mr Lim Jui Khiong, managing director of Adroit - see multimedia report, right

## Profile: Pierre Haren of Ilog

## A war on complacency

Pierre Haren, founder of Ilog, the software development company behind many of Singapore's 'IT 2000' projects, knows how make tough decisions

The French software house Ilog - which has a subsidiary in Singapore - has been called the "Lego brick" manufacturer of software: "constraint-based programming" is the correct formal technical title to describe its product range. Ilog makes spare parts software that offers short-cuts to project development teams.

The full company name is Intelligence Logicielle, but like so many IT companies whose products grew out of the 'artificial intelligence' (AI) school, Ilog is keen to locate its work in the real world and avoid the AI tag - "we don't worry about trying to make an expert system that is smarter than people. But we do try to find better ways to program".

Pierre Haren, founder and president of Ilog, earned his spurs at the top of the French civil service. In the course of his studies at the intellectually highbrow Ecole Polytechnique, a centre that instils an understanding of science and technology into the senior ranks of French bureaucracy, Haren took an option in sociology.

In the high-octane world of the Ecole Polytechnique, this was not a self-indulgent venture into academically unsound territory. Haren recalls a series of tough



Pierre Haren: Ilog could become 'the Intel of software'

assignments, studying business problems: "One company we visited was a small electronics business that had 99 per cent of the French market in one type of TV set. But we found that their main problem was not technical - it was a power struggle between the head of technology and the head of the company. Their R&D was too advanced and it wasn't going to result in real products."

Another study that left its mark on Haren involved an attempt to optimise the use of cargo pallets at Orly Airport. "A huge stock of 3,000 rented pallets were kept in

storage because the cargo handlers were concerned to avoid penalties for leaving cargo untouched due to a possible sudden shortage of pallets that never occurred," he says. "It was my first real look at companies and I saw that real life is more bizarre and convoluted than anything I had been prepared for by my mathematics training."

A posting at the Ministry of the Sea, during the early years of Mitterrand's presidency, followed. Haren's brief ranged from fisheries to naval architecture. He introduced the ministry's first computer and axed a prestige project to launch a million-ton nuclear-powered oil tanker. "To Haren, this was 'blatantly a crazy idea'."

He remains proud of his ability to take potentially unpopular decisions. Another victim of Haren's campaign for reason and restraint was a proposed huge passenger hovercraft - "it would have slid around like a soapbar," is Haren's blunt obituary on this technological dream.

He tried to shift ministry funding towards smaller enterprises, but grew frustrated with the slow life cycle of most projects. The accelerated development that seemed to characterise software projects drew Haren to France's Inra national research centre for computer science.

In four years he created a 30-strong team who formed the core of Ilog when Haren turned his back on government service in 1987 - "our motto was that good ideas in Artificial Intelligence are in fact better ways to program".

According to Haren his notion was "hardwired into the name of the company". The ensuing nine years has seen Ilog grow to a \$21m company with 200 employees and a Nasdaq listing in the pipeline.

The image of a warehouse full of cargo pallets languishing at Orly still influences Haren's outlook: "My early training was largely in negative experiences. But you rarely discover what not to do. That isn't considered to be knowledge, and mistakes aren't explained properly."

Logistics has proved a lucrative market for Ilog's products and consultancy. The Port of Singapore Authority equipped its programmers with Ilog systems so they could devise the most cost-effective way of turning around container traffic in the bare minimum of time, see report, page 10.

Asia-Pacific has proved an unexpected money-spinner

for Ilog. With skilled staff costing less than in the west, it was assumed that Ilog's main selling proposition, the ability to slash development times and maximise human programming resources, would lack impact. But the Asian Tiger economies are keen to leapfrog bottlenecks frequently encountered in the west. Businesses are swift to look beyond the technical detail of an IT project and identify its impact on the bottom line. So Ilog's best-selling tools, Ilog Solver and Ilog Schedule, have proved a big hit.

## Clear message

Ilog's apparent success has only spurred Haren into a war on complacency. He files economy-class when travelling long-haul, and lectures the company's far-flung empire on the dangers of assuming Ilog has secured its place in constantly-shifting industry. Employees recall with amusement his announcements that "we haven't even begun to succeed," but the message is clear: Ilog has to choose where it goes from here.

Haren's anthem is that his company can become the Intel of software, an item of core knowledge that rests deep behind the facade of common applications. Relationships with Sun, Hewlett-Packard and Informix have all been formed, but Haren is determined to maintain independence. "There are too many forces in the world at the moment. I wouldn't describe our work with these organisations as alliances, but we are good friends."

Ilog looks set to remain a force apart, pragmatic about its small size and happy to work alongside even smaller, start-up companies in areas such as the East Asia.

The man who wielded the axe against pet projects in a Paris ministry is still prepared to ignore orthodox thinking. With two children demanding access to the computer age, Haren bought a 486-based computer for home use. His wife was sceptical about its benefits but was won around when she discovered how Internet access could assist in her theology degree.

Haren is not impressed by IT industry suggestions that all '486 computer users owe themselves a Pentium chip upgrade: "We will skip the Pentium generation and buy a 686 type machine, when that comes along."

His domestic IT policy sums up Ilog's attempt to keep a safe distance from an unpredictable industry.



Richard Susskind: realistic about the time frame

Dr Susskind, a London lawyer, writes in today's separate FT-IT Guide, "Doing Business On-Line".

He is visiting professor at the Centre for Law, Computers and Technology at the University of Strathclyde and sits on the court of the Worshipful Company of Information Technologists in London.

Philip Manchester

## Multimedia in business

## Success in a niche market

Lim Jui Khiong, pictured, left, wears his managing director title lightly. Adroit, the \$55m (\$2.28m) software house he founded three years ago, addresses a niche market - multimedia system integration - and half of his 50 staff are artists and designers, rather than software programmers.

Mr Lim may have 11 years with IBM Singapore under his belt, but his new home - in Singapore's science park, near the university - is a far cry from the sombre office block owned by the US industry giant in the city's business district.

Mr Lim jokes that Adroit's new office happens to be diagonally opposite an IBM facility, but does he still mix with former IBM colleagues? "With some of them," he replies with a laugh.

With a small base and a very definite market in mind, Mr Lim thinks focusing on clearly defined areas is the key to success. "As a small organisation, we don't want to attempt to produce proprietary products. We aim to add value to systems using Microsoft Windows and Windows NT," he says.

As an example he points to one of Adroit's financial-sector clients, Standard Chartered Bank's MoneyLink Centres offer 24 hour banking facilities. The key selling point of MoneyLink terminals is that they permit retail customers to talk live to bank personnel.

Standard Chartered had no need for an entirely new technology to deliver this facility. Instead Adroit wrote a Kiosk Operating System on top of a conventional PC environment.

"The company was prepared to employ applications development programs from third party software houses. This let our multimedia development people concentrate on the interface," says Mr Lim. The Standard Chartered Bank contract was worth nearly \$31m and the attraction of a multimedia solution owed more to tim-

ing than technology.

"Four or five years ago, the pricing of multimedia products was not appropriate," Mr Lim recalls. "The constant rule of falling prices meeting market approval applied, as is usual in IT. Three years ago, you needed an adapter card to use video images on your PC. Today it comes with the PC and you get a better quality image."

Adroit's key weapon is a set of tools written in house that allow non-IT specialists - the artists and designers that comprise half of Mr Lim's staff, for example - to build and use a multimedia system. The \$51.6m Singapore Airlines Training System is one project which benefited from this approach.

The airline wanted an IT system to enhance its cabin-crew training programme. The package had to be flexible enough to accommodate changes in airline regulations and simple enough to be maintained by a clerk. Adroit began by defining the skill set needed for the person using the system, and then worked backwards to produce a tool that could be used by any employee familiar with Microsoft Word and the popular presentation package, PowerPoint.

"The only thing that's constant in the aviation business is change," says Mr Lim. "Every week they get a stack of memos outlining new procedures. That was the primary challenge in designing the SATS."

Ease-of-use of its products is key to Adroit's success. This is driven by Mr Lim's careful balancing act in recruiting personnel from both within and beyond the IT world. Referring to the creative and analytic functions of his staff, he quips: "We have both sides of the brain in one company."

From a turnover of \$81.2m, its first year's trading to \$55m in year two, Adroit has clearly made the most of this unusual formula.



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Software

■ US market • By Louise Kehoe

From the latest Star Wars "shoot 'em up" to engaging reading lessons for six-year-olds, the shelves of software stores are now packed with computer games for children of all ages.

The multimedia personal computer has become the ultimate game machine, with sales expected to jump from \$15bn in 1995 to \$30bn this year, according to market analysts.

Microsoft's Windows 95 has established a solid standard for multimedia compatibility and the problems that many personal computer users encountered with installing and running early CD-ROM games, are now history. The latest generation of PC games come to life as soon as you close the CD-ROM drive drawer.

Software publishers are hoping that these developments will give a boost to flagging sales of "home computer" software - including entertainment, creativity and education programs. North American sales for the first half of 1996 were \$765m, down four per cent from the same period a year earlier, according to the Software Publishers' Association, an industry trade group.

Competition in the home computer software market is intense and prices are beginning to come down as software developers vie for a

## Games boost sales of home PCs

FT  
OUT

Focus on the market for PC games and educational software

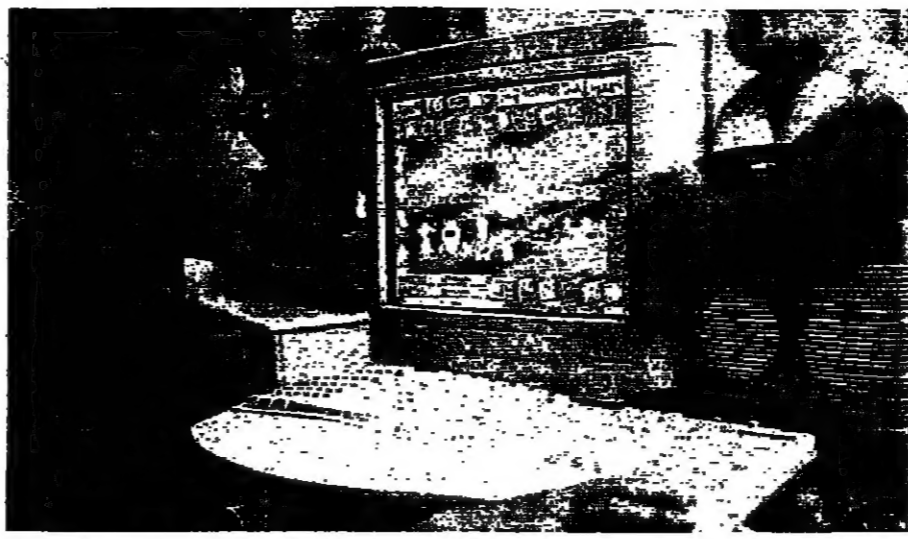
bigger share of the market. The "bad news" for PC game players, however, is that the latest games software takes full advantage of advances in PC technology. If your PC is more than a

couple of years old, you may not be pleased with the performance of the new multimedia games.

These games run best on a PC with a fast Pentium processor and the latest graphics and sound systems. The more memory you have, the better. 16Megabytes is a good target. CD-ROM drives need to be at least "4x" speed, to avoid jerky video and unsynchronised speech.

For PC game buyers, however, the biggest challenge may be choosing among hundreds of software titles. Mistakes can be costly. Traditionally, computer stores have insisted that software is "non-returnable" because a customer could load a program on to his or her computer before returning the product.

With most PC games now sold on CDs, without which the program will not run, there is no longer a good reason to continue this practice. Still, it remains the norm. Help is at hand. Some



Young players of new games software are often familiar with the latest advances in PC technology

Internet research will make picking the winners among the hundreds of games stocked by computer "super-stores" much easier.

Newsweek magazine has created a Web site directed at parents buying software for their children: (www.NewsweekParents-Guide.com). Focused primarily on educational software for two to 12-year-olds, it provides reviews of the latest programs.

Happy Puppy Games (www.happypuppy.com) is a good starting point if you want to find out about the "hot" game titles for teenagers and much older kids. For the latest in online games that enable players to compete remotely, over the Internet, try Engage Games

Online (www.gamesonline.com). Now on "beta test", this site promises dozens of multimedia online games and is currently free of charge.

Perhaps the only drawback of the Internet sites is that they tend to focus on the latest software, which is not necessarily the best. Stalwarts such as KidPix, from Broderbund, a children's drawing program and Oregon Trail, from Meca, an American history lesson program that is celebrating its 25th anniversary this year, remain sure fire winners.

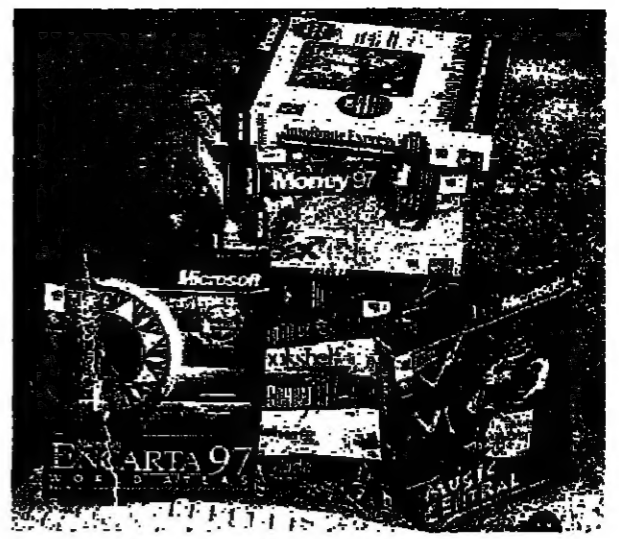
Similarly, the various editions of Carmen Sandiego, the Broderbund detective games that teach geography or history lessons painlessly, have stood the test of time.

These popular computer games keep coming back in updated versions that take advantage of the latest PC technology. Another classic is Star Wars Rebel Assault II, from LucasArts Entertainment. They are big winners among the generation of teens who grew up playing the originals.

### Variations

Many games software publishers have parlayed one winning program into a series. The Marx series of simulation games that started with Sim City, now has at least a dozen variants. Sim Golf and Sim Copter are among the latest.

The "Dr Brain" puzzle games set from Sierra On-



New consumer software products from Microsoft

Line is into its fourth version with a new Time Warp puzzle. Another set of games grabbing the attention of the younger set is the Munchers series of quizzes from MECC.

One of the fastest growing segments of the home computer software market is programs for very young children. Among the "educational" programs that are selling well in the US, according to the SFA, are Freddy Fish from Humongous Entertainment and Disney's Toy Story Animated Storybook.

But there is something to suit all tastes on the "games" side of the software store. The Beavis and Butt-Head programs from Viacom New-media may not win parental approval, but they are sure-

fire winners among their young MTV fans - "Little Things" features, for example, a spitting competition in which the cartoon characters target passers-by.

If you are looking for something more highbrow, Smart Games from Random House is a good bet. This program includes over 800 brain teasers for 14-year-olds and up. Younger children may also enjoy some of the puzzles.

The top hits of the season are, however, expected to be Quake, Doom and Duke Nukem 3D, all from GT Interactive. These gruesome adventure games have captured the imaginations of the teen-age boys who remain the biggest buyers of home computer software.

■ Video and online games • By Tom Foremski

## Big scope for games in cyberspace

By the end of the decade, 10 million US households are expected to be accessing online games in one form or another

The video games market is rapidly heading towards multiplayer games and the Internet as game developers realise that the old model of producing games just for video-game consoles neglects new sources of revenue.

In terms of the traditional video games market, Nintendo recently introduced its 64-bit based systems which provides impressive graphics, but better graphics alone might not be enough to duplicate Nintendo's earlier success in the games market.

The online and Internet games market is set to become a significant revenue source within the overall online/Internet industry, says the US market research group, Jupiter Communications.

Over the next four years, the online games market, which includes Internet and online services, will account for 11 per cent of total Internet industry revenues by the year 2000. This compares with about a 2.5 per cent share for 1995.

The revenues for online games will come from a variety of sources. These will include hourly charges paid by game players, subscription based games, advertising, pay-per-play charges.

The online games market also differs in one important aspect, notes Jupiter. Users do not need to purchase the game but will be willing to pay as they go, similar to coin-operated arcade games.

Jupiter estimates that revenues from pay-per-play charges and advertising, which each accounted for one per cent or less of the market revenues in 1995, will account for 37 per cent and 25 per cent respectively of total online and Internet games market revenues by the year 2000.

Players will gain access to games in a variety of ways. This will be via World Wide Web-based sites, through online services such as AOL, through direct dial-up networks such as DWANG, and through stand-alone games consoles that have been upgraded for interactivity.

An example of this is Net Link for the Sega Saturn platform. Analysts forecast that by the year 2000, about 10m US households are expected to be accessing online games in one form or another. This trend is being fuelled by big investments in small start-up companies and by large companies, such as Sony and AOL.

"It used to be that online gamers were an over-

whelmingly young and male constituency. As the genres of online games shift beyond text-based role-playing games and action games, online games are appealing to a broader demographic profile," Jupiter says.

The US video games company, 3DO, recently said it is re-organising its operations to concentrate on online games and it might sell its hardware business. It has already introduced an online game called Meridian 59, which is played over the Internet.

"The Internet - and Internet entertainment in particular - is a huge opportunity," says Trip Hawkins, chief executive of 3DO. "We are moving toward focusing entirely on the challenge of building a strong entertainment software studio, with the Internet as a catalyst for growth. Meridian 59 is only the beginning of our Internet plans."

### Global players

Sega Saturn Net Link allows Saturn videogame console owners to upgrade via a modem and special software to use Internet connections to play against other players. It also offers Internet services that turn a television set into a web browser with the use of proprietary technology that sharpens the resolution of TV screens.

Early next year, Sega will release a new version of its video game, Sega Rally

Championship, designed to be used on Net Link. It will link players across the Internet. Sega says that several third-party game companies, including Capcom and GT Interactive, are planning to deliver Net Link games in 1997.

Along with online game playing, multiplayer game demand is on the rise. A survey of 2,700 video game players by US-based SpotMedia Communications, reveals that about 75 per cent would likely not buy a game if it does not support multiple players. And about 27 per cent say that are planning to buy multi-player games.

Around a half of those surveyed say that they would be willing to pay up to \$40 a month to play against others on an online or Internet-based service.

One of the problems in playing games with other contestants is trying to match players with similar skills and interests. A leading video games developer, Electronic Arts, has introduced its Multiplayer Matchup Service which links game players. Logging onto its web site, <http://www.ea.com>, players fill out details such as name, location, e-mail address, game preferences, skill level, hardware type and modem speed.

A search engine then sorts players by various criteria, allowing players to find willing participants and challenge each other or set up tournaments.

"Whether consumers are

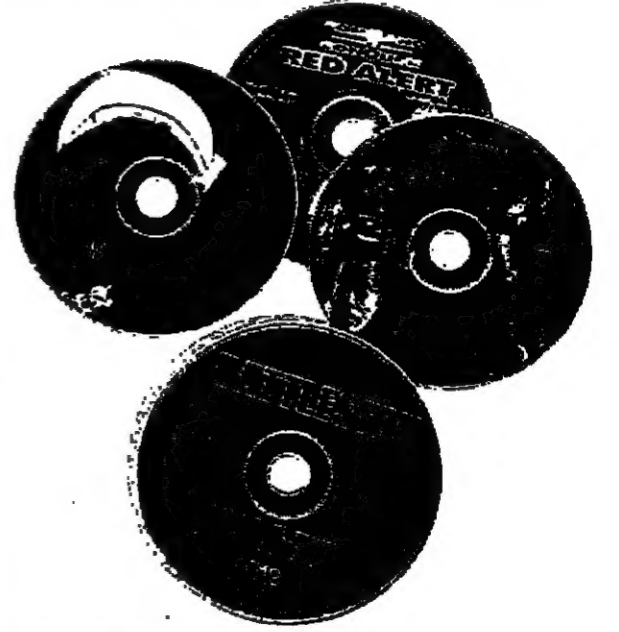
seeking to enjoy the social aspects of computer gaming or the quest for fierce competition, the Multiplayer Matchup Service will pair players with similar interests," says Chris Mike, director of Electronic Arts Web Services.

For online games to really start taking off, users will need faster Internet access. This will come from greater use of cable modems and also from modems using asymmetric digital subscriber line technology that can operate over existing telephone lines.

These technologies, how-

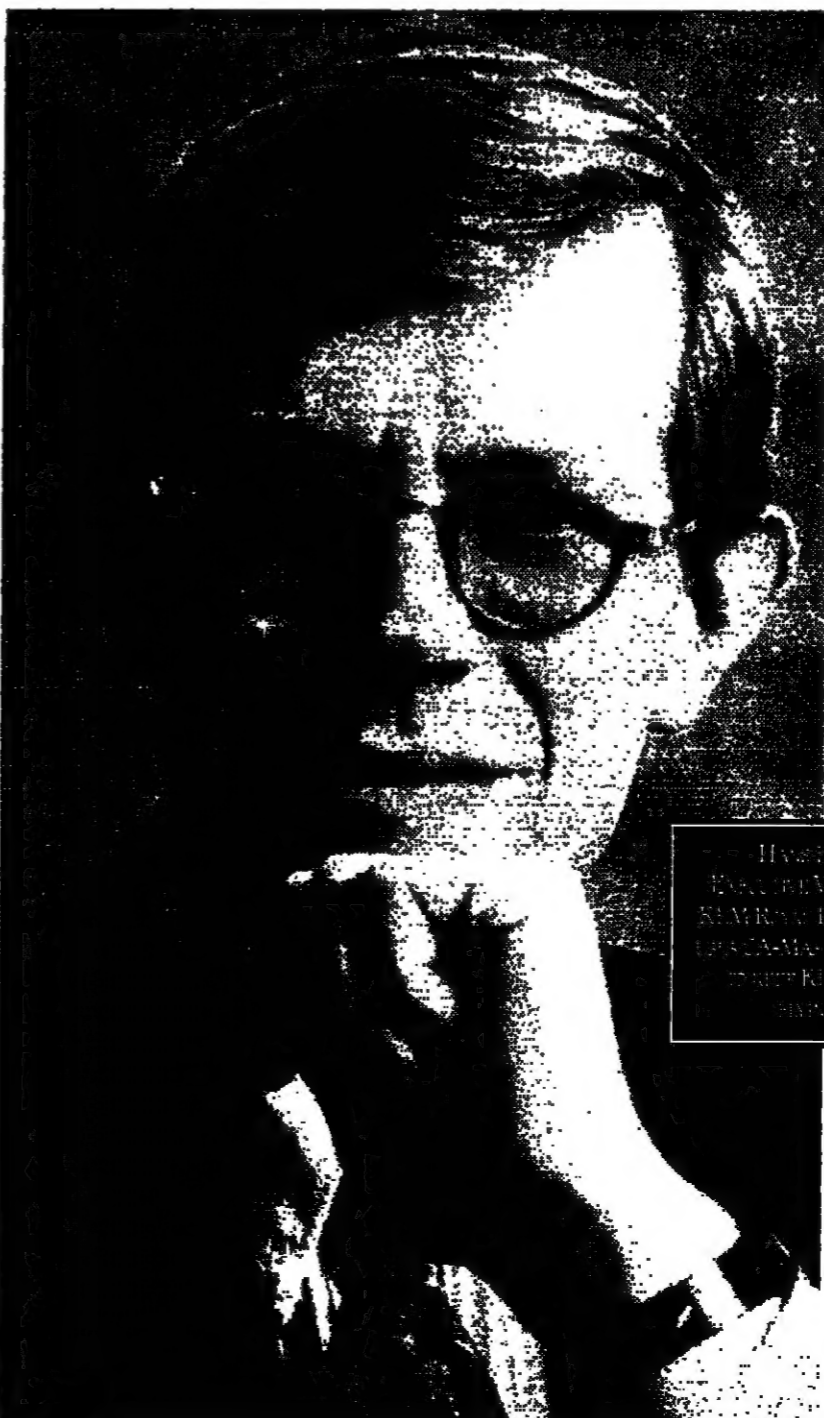
ever, will require substantial investments by cable TV companies and telephone companies to support data transfer rates that are as much as ten times faster than current modem data rates. This could take several years, but the communications equipment costs are falling and as manufacturers crank up production lines, costs should fall even further.

In the meantime, games creators are designing games that can still be effectively played over regular modems with graphics images loaded from a CD-ROM disks.



Most PC games are now sold in CD-ROM format

## Software Flyer.



The airline business is one of the most competitive on earth. So to ensure their continued success, KLM Royal Dutch Airlines brought Computer Associates onboard.

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As Executive Vice President and Corporate Controller, Hans Bruggink says, "KLM is an international business with offices all over the globe. So we needed financial software that was multi-language and multi-currency. In both cases, Masterpiece fit the bill."

What's more, Bruggink appreciates the fact that Masterpiece operates in "real-time," giving his staff immediate access to the information they need right from their PCs.

Perhaps best of all, Bruggink says, CA and KLM worked together to customise Masterpiece to precisely fit their needs: "CA made sure they had

all the input they needed to tailor Masterpiece to our specific requirements. And they continue to refine the software to keep up with the new demands of our business."

Sounds like a good partnership. "Flying sky high," says Bruggink. Spoken like a true airline executive.

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■ Purchasing trends • By Michael Dempsey

## A change in buying habits in European games market

The average age of a Sony games console fan is 22 and one-in-three owns a PC

The computer games and entertainment market in Europe may not mirror the buoyancy of the US scene, where Nintendo is struggling to meet a projected demand for 1.5m units of its game players by Christmas. But according to the \$46bn entertainment giant Sony, European customers have changed up a gear in their buying habits.

Sony's PlayStation, another dedicated games console, was launched in September 1995. The company claims to have sold 400,000 machines in the UK alone.

A big price reduction, from £259 to £199, had a significant impact on these sales. But Chris Deering, president of Sony Computer Entertainment Europe, points out that PlayStation purchasers are getting a system that shares technology with a powerful Pentium PC.

"It's not the same processing power and memory capabilities. Our hardware uses the same chips as the rest of the IT industry. The same

component prices that influence PC costs have brought down PlayStation prices. The games console is an amazingly inexpensive way to access a huge amount of computing power, albeit dedicated to the graphics function."

This powerful little computer works through the household television set. And Deering is frank about the pricing policy - the PlayStation is there to leverage the more profitable business of turning out the games titles.

"We accept minimal margins on hardware to put machines in homes. It's a razor-and-blade business. We just shipped our one and half millionth unit in Europe. At the same time, we've sold 500,000 copies of Formula One, our best-selling game."

### Big turnover

Deering's point is that the ratio of software, in the form of CD-ROM disks, to hardware, is one to turn conventional software houses green with envy. Sony estimates, for example, that it turns over £1.5m per title every week when its CD-Roms climb into the top three position of the popularity chart.

The image of the games console is inextricably bound with adolescence. But Sony has analysed the demographics of its own large population of games fans. They now have an average age of 22, having grown up in the world of consoles from arch-rivals such as Nintendo or Sega which currently sells the Saturn against the PlayStation.

One-in-three games fans also owns a PC: these figures should kill off false notions of the PC games industry competing head-to-head with the console makers.

"PC sales don't hurt the market," says Deering. "Familiarity with interactive activity in general - and gaming in particular - helps us."

Sony's software sells for £49. A pressing plant in Austria can turn new stock around in a week, allowing the games giant to move nimbly if it finds it has a surprise hit on its hands.

But pressing CD-Roms is the easy part. Microprose, a \$100m US games software company, sells games for the PlayStation. It is one of many third parties that keeps the user community keen - but its main market is the PC CD-ROM, not the games console.

Continued on page 15

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Microsystems Ltd  
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For further details regarding the FT-IT DIRECTORY please call Caspar Ingham on Tel: +44 (0) 171 573 6000

JAYICO LTD

## Games market expands

Continued from page 13

up over phone lines to share their sport through PC screens.

BT Wireplay is an operation that uses a central computer to project a bulletin board that games fans can browse and leave messages on, setting up joint plays with other individuals.

This is not the Internet, which Colin Duffy, head of games at BT's Internet and multimedia services arm, says is far too slow for group participation in fast-moving games.

Wireplay will operate as a profit centre in BT, charging participants £1.50 an hour during evenings and weekends. The daytime rate is set at a deliberately prohibitive £2, because BT does not expect much traffic during working hours. It can currently support up to 500 simultaneous game-plays. This figure will soon grow to 1,000, with BT then adding more servers as users appear.

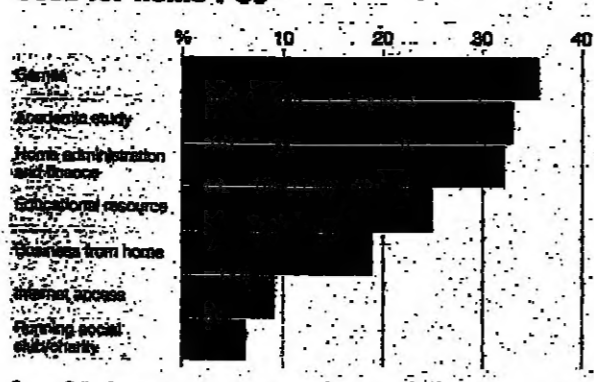
Wireplay Bridge is a game that gives a strong flavour of BT's thinking. Developed with the English Bridge Union, it is envisaged as an activity that can draw in spectators.

BT is using a specialist games press to distribute free games on CD-Rom and clearly believes it can create a new entertainment medium. A Wireplay licence has already been sold to US telecoms giant MCI, with BT claiming fees on a royalty basis as MCI's games turnover increases.

Back at Sony, Deering denigrates BT's pretender to the crown of games king: "Games like this have a role, but they are in a primitive state relative to the high-speed arcade style games we deal in."

Not that this competition is bad news - "it will expand the entire market for games as people become familiar with new forms of entertainment," he says, adding a poetic metaphor: "All ships rise on the tide."

### Uses for home PCs\*



Source: Gallup for AST. Approximately 1,000 respondents with home PCs. Almost three-quarters of UK parents believe that using a home PC will eventually enhance their children's employment prospects.

Deering joined Sony after a career in Columbia Pictures that began before the US film studio was bought by the Japanese electronics concern. Today, the Japanese PlayStation factory is reported to be churning out consoles at a rate of a million a month. Whether this success reflects on the IT sector or mass entertainment is irrelevant: it is an impressive business using detailed user-profiles that would benefit some of today's mainstream IT companies.

### Big rise in world CD sales

More than 18m interactive CDs were sold worldwide last year and this figure is expected to rise to 350m by the year 2000, according to a new report from Leybold Systems, a leading manufacturer in the CD-Rom sector, writes Michael Whitshire.

Sales of interactive CDs may already be as high as 80m a year, but this will grow by 50 per cent year-on-year, forecasts Leybold. Sales of CDs in the educational and games market is expected to reach \$500m by the year 2000. Leybold, based in Germany, suggests that European publishers of large hardback books, such as dictionaries and encyclopaedias, "must invest in new technology now, if they are not to lose this sector of the market to Asian publishers".

### Educational value of PCs

Almost three-quarters (72 per cent) of parents in the

UK believe that using a personal computer at home will enhance their children's employment prospects, according to a new Gallup poll.

The survey also found that 45 per cent of parents claim that their children's performance has improved since a PC was introduced into their home.

The report, conducted on behalf of AST Europe - a subsidiary of the US-based AST Research which has a turnover of \$2.4bn - found that education is one of the respondents' key uses for their personal computers.

While playing games takes pole position at 36 per cent - see chart above - this is closely followed by academic study (25 per cent), home administration and finances (22 per cent) and use as a learning tool for children (20 per cent).

A significant 50 per cent of PC buyers in the UK between the ages of 16 and 24 use their machine for educational study, claims the report.

Despite the popularity of computer games, only 5 per cent of parents fear that their children spend too much time using the home PC. And of parents who use the PC alongside their children, 16 per cent introduce them to computing before the age of five.

Although computer usage remains steady as children develop, the survey found a noticeable dip occurs between the ages of 11 and 15 years, rising again when the child approaches 'A' level examinations and further education.

More details from AST in the UK on 44 (0)181 587 3002.

### Personality profiles Keith Arnold

Keith Arnold has travelled far since he started more than 30 years ago as an apprentice technician in the computer and electronics laboratories of University College, Swansea.

As a mature student, he went on to take a degree in computer technology, one year behind another subsequently highly successful Welsh businessman and Swansea graduate, Terry Matthews, founder of the Canadian telecommunications company, Newbridge Networks.

For his doctorate he carried out pioneering research into the then new microcomputer chips developed by Intel before starting in business on his own in 1977. With help from a local private banker he founded Race Electronics, one of the early UK contract electronics manufacturers, making products at the time ranging from BBC brand computers to on-board electronic systems for Jaguar cars.

In 1983 he moved on to form another company, Assembly and Automation (Electronics), which he developed into a supplier of sophisticated equipment for British Airways, BT, Cray, and other high technology businesses, before selling to the Singapore-based electronics multinational, Flextronics, last year.

Now entitled to wear the robes and regalia that go with being the tenth master of the 100th livery company, the Information Technologists, Arnold finds himself involved once again with apprenticeships, this time as head of an organisation responsible for developing a group of around 20 individuals working their way through indenture to City freemen status.

In September, the first four apprentices to take part completed their four year courses of study and training, which take place within sponsoring companies and lead to a degree or similar qualification.

Each is overseen by an apprentice master (a member of the Livery Company) and a mentor from their

## The master apprentice

Rhys David profiles the newly-installed master of London's Worshipful Company of Information Technologists



Arnold: his theme is 'IT excellence'

own company, and will be expected each year to produce a dissertation on their field of work.

"We are recruiting some very talented and enthusiastic people, who benefit from learning and training at work and from being able to participate in all the activities associated with a traditional livery company," Arnold points out.

Many expanding companies have found it necessary to use expensive overdrift funding, with software pioneers experiencing the greatest difficulties because

investment in the sector. "The attitude of venture capital providers to high technology companies has traditionally been very different here compared with the other side of the Atlantic. UK providers were scared by the problems of the 1980s but the industry is here to stay and the returns are there to be made, Arnold points out."

All too often information from one part of the environment cannot be accessed

their ideas are hard to explain to non-technical funders.

In IT, Arnold points out, it is not necessarily the large companies which take over the small but the fast which take over the slow. "The slow, however, are often the poor who are not able to expand because of a lack of funding."

The results of the study which are due to be published very shortly have given Arnold reason to feel confident, however, that attitudes are changing and that further progress can be made during his period in office.

"There is resistance to change because businesses have invested large amounts of money in their own systems but we need to bring the various organisations together to create a common platform for the City of London. This is what other centres around the world including New York, Frankfurt and Paris are trying to do," he says.

These two challenges - together with more than 200 functions including reciprocal engagements with other livery companies - seem likely to take up most of Arnold's energy this year, leaving little time to consider his options on leaving office.

He now operates on a non-executive basis for Flextronics, having stepped down as director of European operations to carry out his duties as master this year.

For contractual reasons, he will not be re-entering the same business should he decide to go it alone again but he is likely, he admits, to remain active from his base in Wales offering advice as a consultant well after his time as master is over.

London lawyer Richard Susskind, also a member of the Worshipful Company of Information Technologists, writes in today's separate FT-IT magazine, "Doing Business On-Line".

A review of his latest book, on "The Future of Law" and the impact of IT on legal reform, appears on page 7 of this issue of the IT Review.

Increasing IT expertise is crucial to the City of London's future

Arnold: his theme is 'IT excellence'

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## Works like lightning: Hi-Grade's new notebook

The Notino Mvi, latest and sexiest model in the popular range of notebook PCs from Hi-Grade Computers plc, has everything needed for a travelling office. Features include:

<b>Speed</b> Intel Pentium processor. Clock speed 200MHz. Notebooks come no faster.	<b>Battery life</b> 70 minutes' power before recharging. This can be doubled with optional extra Duracell pack.
<b>Visibility</b> 12.1-inch TFT screen. Big by notebook standards. Easy on the eye.	<b>Other features</b> Advanced Power Management. 1Mb ROM wavetable for sound effects. Ergonomic tilt stand. Infra-red port. Trackpad. Optional: fax/modem: MPEG module; network card.
<b>Memory</b> 16Mb RAM, expandable to 64Mb. 256K cache. 1Gb hard disk, 1.44Mb floppy drive.	<b>Warranty</b> 3 years' maintenance. 4-day turnaround guaranteed.
<b>Multimedia</b> 8-speed CD-ROM drive. 16-bit sound card. Speakers. Microphone. Optional MPEG for full-motion images. PAL and NTSC output for TV presentations.	<b>Affordable price</b> £2,999 (plus VAT = £3,523.83). Easy credit or (for business users) lease-rental terms available.
<b>32-bit expandability</b> PC card slots support Ethernet card, fax/modem, SCSI ports.	

**Hi-Grade**

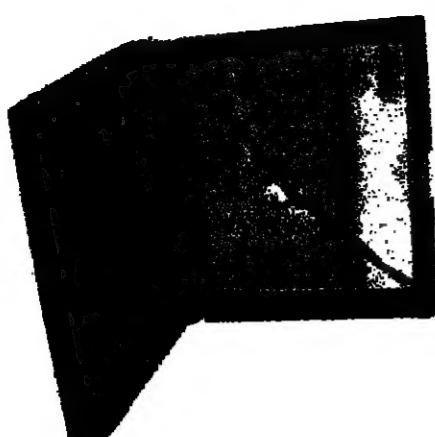
Technology with a human face **0181 532 6117**

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## THE BIG SCREEN EXPERIENCE

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Spread your wings with the Samsung Sens™Pro500, a laptop with an impressive 12.1" diagonal screen. It's so sharp and easy on the eye, you'll find working away from the office is at last really a pleasure. The screen has just the kind of quality you'd expect from the manufacturer of Europe's biggest selling monitors, the choice of leading corporates the world over.

And with its wide acceptance angle, your audience won't need eagle eyes to see your presentations. As you'd expect, the Samsung Sens™Pro500 is impressively specified, featuring an Intel Pentium processor running at up to 150MHz, 16Mb of RAM, 16-bit stereo sound, 6-speed CD-ROM drive, Windows 95 compatible keyboard and PCMCIA 2.0 support.

But we've added just one more Samsung benefit - we make virtually all of the component count and provide a three year warranty on the complete package.

The Samsung Sens™Pro500. The Laptop no high flyer should be without.

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